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Society for Pennsylvania Archaeology

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ADDENDA TO

"Frauds in Ontario Archaeology"

Insert after page 118 in

Pennsylvania Archaeologist

Vol. XXXI No. 2

On September 15th, Dr. Vernon Leslie was dismissed from the editorship of the *Pennsylvania Archaeologist*, an elected position he held for nearly eleven years.

On October 8th the Board of Directors considered his appeal. It was noted that he was elected in 1953; that no one had been elected to succeed him; that the Constitution states officers retain their posts until their successors are installed; and that Leslie was therefore the legally elected Editor. He was informed, however, that he had "arbitrarily abrogated the office and functions of Editor." The grounds later given for this charge were that he had returned manuscripts, advising authors of the delay and uncertainties created by this situation and offering to let them publish elsewhere if they desired; when the Board agreed to meet on October 8th, Leslie began collecting manuscripts and preparing the next issue. To call this abrogation of office is to possess a dishonest mind.

Then followed an attack on Leslie which concealed two issues: that professional archeologists weren't deceived by the Beardmore fraud, but themselves knowingly deceived; and that the dismissal of Leslie was illegal. It also concealed something larger.

In editing thirty-two issues, Leslie rejected no manuscripts, but achieved this record by rewriting several (with the authors' approval) and returning others with detailed instructions for revisions (only

SAN FERNANDO VALLEY STATE COLLEGE

Northridge, California

September 18, 1961

Mr. John Witthoft
State Museum Building
Harrisburg, Pennsylvania

Dear John:

I just received a letter from Vern Leslie which made me very unhappy. He states that he was summarily removed as Editor of the _Pennsylvania Archeologist_ by you, and that the sole reason you gave (in the presence of a witness) was his decision to publish the Beardmore article.

My immediate reaction was a very personal one: you have hurt an innocent person who has served the Society and archeology conscientiously and competently, with almost herculean effort, Vern wrote that you defended your action on the alleged grounds that the Society may be open to a libel suit. This is the sort of loose talk that goes with irresponsible action. The laws of libel do not apply to the dead, and Dodd is dead. Moreover, there can be no libel if both accuracy and justification for publication can be proved. However, your action does fall within the field of slander.

My second reaction concerns the rules of scholarship. I won't spell these out for you. You know them, even if you ignore them. But if this matter isn't cleared up quietly and decently immediately, I will spell out the details of your action on a mimeographing machine and have my secretary mail a copy to every member of the Society, as well as to every member of the Society for American Archeology.

Yours truly,

Edmund Carpenter
Chairman, Department of Anthropology

Archeologist became and has remained one of the best archeological publications in America. Not the least of his success here was the result of his willingness to print controversial articles, where truth was served. He put much of his life into this journal; he suffered through many unpleasant incidents which are an inevitable part of serious editing. His sole compensation has been satisfaction in work well done.

The Beardmore article was submitted to Vern several years ago. He sent copies, or excerpts, to those concerned, with an invitation to reply if they chose. He wrote to me several times suggesting that it be toned down, but though we both tried, it became obvious that the data, not the interpretations, were the damaging sections. Both Vern and I submitted copies of the article to a number of prominent archeologists: all urged that it be printed in the form in which it did appear. I have one of these letters before me now, from a Viking Award recipient.

I do not know Vern's personal sympathies in this matter. I do know that he acted in the only way an honest, conscientious editor could act and that absolutely no criticism can fairly be attached to him.

a review of *Iroquois Pottery Types* (which noted thirty-six factual errors on two pages alone of that work), the Beardmore article (which documented the conversion of a joke into a fraud), and the announcement that additional frauds would be discussed in forthcoming issues. Throughout the Board's actions, though not its words, were an insistence that the journal serve the ends and reflect the prejudices of a small group more interested in professional politics than scientific truth.

The history of most professions is a shift from principles to power. The *Pennsylvania Archaeologist* remained untouched by such pressures and reviewed works on merit -- to the increasing embarrassment of the professional members of the Board.

I am writing not in the expectation that this immoral act will be corrected, but to make the record clear and public, and to make sure this incident will not go out of mind and be forgotten.

Edmund Carpenter

"Only a total stranger could ask a question like yours. Is there a Control Authority? There are only control authorities. Frankly it isn't their function to hunt out errors in the vulgar sense, for errors don't happen, and even when once in a while an error does happen, . . . who can say finally that it's an error?"

Kafka

THE SOCIETY FOR PENNSYLVANIA ARCHAEOLOGY

You received a copy of the proposed revised Constitution of the Society for Pennsylvania Archaeology with your last issue of *The Pennsylvania Archaeologist.* We want to complete the revision as soon as possible, so the Directors have authorized a mail vote on its adoption. Please check the appropriate space below and return this ballot to the Secretary-Treasurer, Vincent R. Mrozoski, 407 Phillips Street, Aliquippa, Pa.

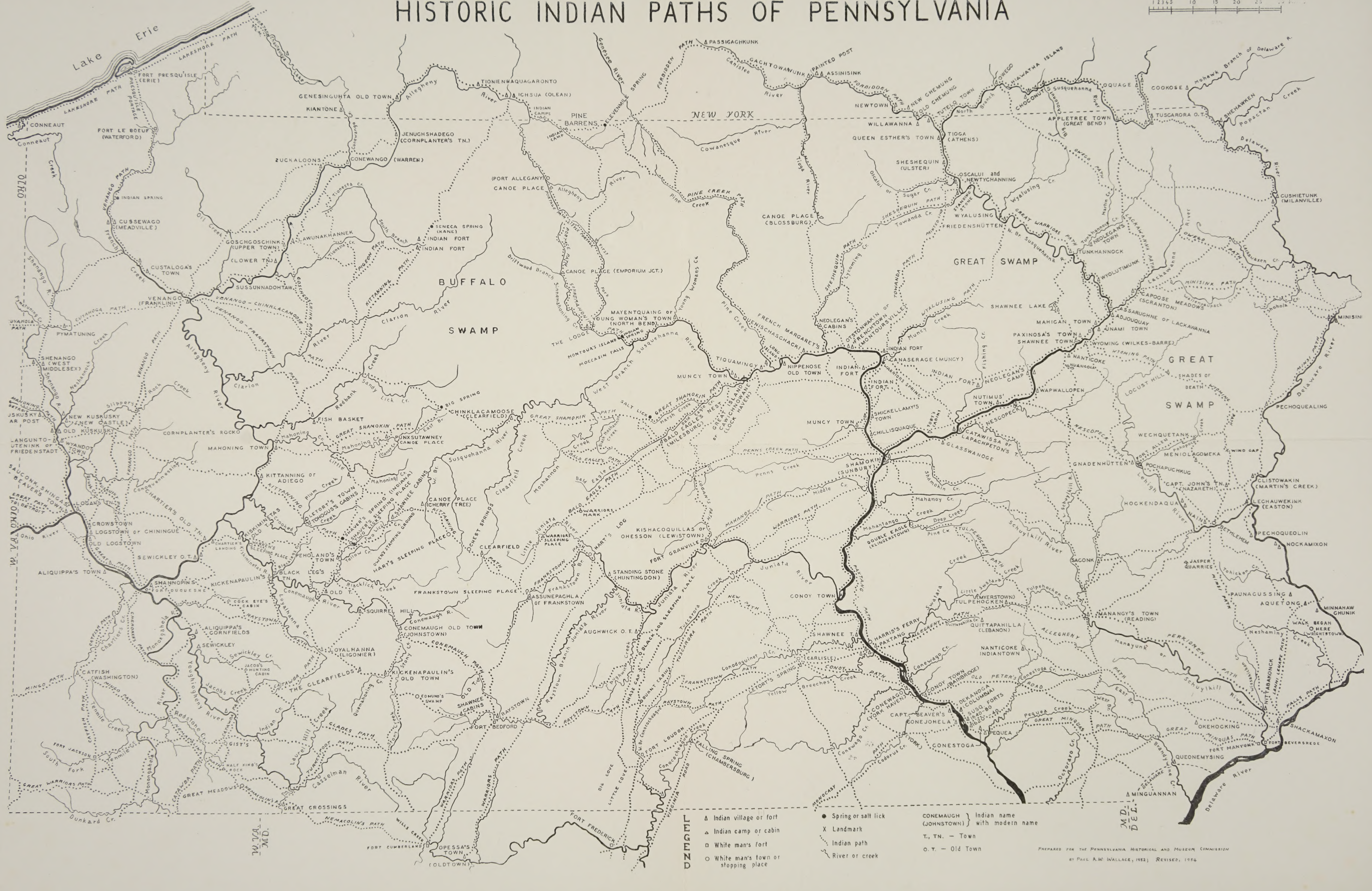
If you vote against adoption of this Constitution, we would like to know what your objections are, so that they can be forwarded to the Constitution Committee. They will be considered as a basis for future amendments, whether or not the Constitution is adopted in its present form.

F. SCHUYLER MILLER, President

( ) YES -- I vote to adopt the revised Constitution.

( ) NO -- I vote to reject the revised Constitution.

HISTORIC INDIAN PATHS OF PENNSYLVANIA


1 2 3 4 5 10 15 20 25
Lake Erie
LAKESHORE PATH
FORT PRESQU'ISLE (ERIE)
PRESQU'ISLE PORTAGE
CONNEAUT
Conneaut Creek
FORT LE BOEUF (WATERFORD)
VENANGO PATH
INDIAN SPRING
CUSSEWAGO (MEADVILLE)
French Creek
CUSTALOGA'S TOWN
VENANGO (FRANKLIN)
CUYAHOGA PATH
PYMATUNING
SHENANGO (WEST MIDDLESEX)
Shenango R.
Neshannock
MAHONING PATH
KUSKUSKY TRADING POST
NEW KUSKUSKY (NEW CASTLE)
OLD KUSKUSKY
LANGUNTO-UTENINK or FRIEDENSTADT
WYANDOT TOWN
SAUCONK, SHINGAS' or BEAVER'S TOWN
GREAT PATH TO DETROIT
LOGAN'S TN.
CROWSTOWN
LOGSTOWN or CHININGUÉ
OLD LOGSTOWN
Ohio River
ALIQUIPPA'S TOWN
SEWICKLEY O.T.
CHARTIER'S OLD TN.
SHANNOPIN'S TOWN
FORT DUQUESNE
KICKENAPAULIN'S
COCK EYE'S CABIN
ALIQUIPPA'S CORNFIELDS
SEWICKLEY
Chartiers Cr.
CATFISH PATH
CATFISH (WASHINGTON)
MINGO PATH
Tenmile Creek
FORT JACKSON
South Fork
GREAT WARRIORS PATH
Monongahela R.
Youghiogheny River
Redstone Cr.
CATAWBA PATH
GIST'S
HALF KING'S ROCK
GREAT MEADOWS
NEMACOLIN'S PATH
GREAT CROSSINGS
Dunkard Cr.
W. VA.
MD.
OHIO
Jacobs Creek
JACOB'S HUNTING CABIN
Sewickley Cr.
Indian Cr.
Laurel Hill Creek
GLADES PATH
Casselman River
TURKEYFOOT PATH
WILLS CREEK
FORT CUMBERLAND
OPESSA'S TOWN (OLDTOWN)
WARRIORS PATH
FORT FREDERICK
RAYSTOWN PATH
THE CLEARFIELDS
Loyalhanna Cr.
LOYALHANNA (LIGONIER)
Quemahoning Cr.
EDMUND'S SWAMP
KICKENAPAULIN'S OLD TOWN
SHAWNEE CABINS
OLD T.
FORT BEDFORD
RAYSTOWN
CONEMAUGH OLD TOWN (JOHNSTOWN)
CONEMAUGH PATH
Conemaugh R.
SQUIRREL HILL
Blacklick Creek
OLD T.
BLACK LEG'S TN.
KISKIMINETAS OLD TOWN
Kiskiminetas R.
CHARTIER'S LANDING
SHANNOPIN'S SLEEPING PLACE
PEHOLAND'S TOWN
Yellow Cr.
Crooked Creek
Plum Creek
LETORT'S TOWN
NOTOUGUSS CABINS
SHAVER'S SPRING
SHAVER'S SLEEPING PLACE
SHAWNEE CABINS
TWO LICK
OWENS STAMPING GROUND
HART'S SLEEPING PLACE
KITTANNING PATH
KITTANNING or ADIEGO
Cowanshannock
Mahoning Cr.
CANOE PLACE (CHERRY TREE)
CHEST SPRINGS
CLEARFIELD
CORNPLANTER'S ROCK
MAHONING TOWN
FISH BASKET
GREAT SHAMOKIN PATH
PUNXSUTAWNEY
CANOE PLACE
BIG SPRING
CHINKLACAMOOSE (CLEARFIELD)
Redbank Creek
Sandy Lick Cr.
Clarion
Clarion River
Allegheny River
VENANGO-CHINKLACAMOOSE PATH
VENANGO-FRANKSTOWN PATH
SUSSUNNADOHTAW
GOSCHGOSCHINK (UPPER TOWN)
(LOWER TN.)
LAWUNAKHANNEK
Oil Creek
Tionesta Cr.
PIGEON PATH
KITTANNING PATH
SENECA SPRING (KANE)
INDIAN FORT
INDIAN FORT
South Branch
BUFFALO SWAMP
ZUCKALOONS
CONEWANGO (WARREN)
Conewango Cr.
JENUCHSHADEGO (CORNPLANTER'S TN.)
KIANTONE
GENESINGUHTA OLD TOWN
Allegheny River
TIONIENWAQUAGARONTO
ICHSUA (OLEAN)
INDIAN CAMPS
INDIAN CAMP
PINE BARRENS
ELEVENMILE SPRING
Genesee River
NEW YORK
(FORT ALLEGANY) CANOE PLACE
Allegheny River
Portage Cr.
CANOE PLACE (EMPORIUM JCT.)
Driftwood Branch
Sinnemahoning Cr.
First Fork
SINNEMAHONING PATH
THE LODGE
MONTOUR'S ISLAND
MOCCASIN FALLS
INDIAN SPRING
MAYENTQUAING or YOUNG WOMAN'S TOWN (NORTH BEND)
Young Womans Cr.
West Branch Susquehanna River
Moshannon Creek
Clearfield Creek
Little Juniata River
WARRIORS SLEEPING PLACE
WARRIORS MARK
BALD EAGLE PATH
Bald Eagle Cr.
HART'S LOG
FRANKSTOWN PATH
FRANKSTOWN SLEEPING PLACE
ASSUNEPACHLA or FRANKSTOWN
Frankstown Br.
STANDING STONE (HUNTINGDON)
Raystown Branch Juniata River
AUGHWICK O.T.
Aughwick Creek
BLACK LOG SLEEPING PLACE
Tuscarora Cr.
TUSCARORA PATH
BURNT CABINS
SHADE GAP
BIG COVE
LITTLE COVE
FORT LOUDON
Conococheague Creek
FALLING SPRING (CHAMBERSBURG)
VIRGINIA ROAD
KISHACOQUILLAS or OHESSON (LEWISTOWN)
FORT GRANVILLE
Juniata River
SALT LICK
GREAT SHAMOKIN PATH
BALD EAGLE'S NEST (MILESBURG)
GREAT ISLAND or CHINGLECLAMOUCHE (LOCK HAVEN)
Marsh Creek
Penns Creek
PENNS CREEK PATH
MAHANOY PATH
WARRIORS PATH
Middle Cr.
TIOUAMINGY
LONG ISLAND
QUENISCHASCHACKI
FRENCH MARGARET'S
Pine Creek
PINE CREEK PATH
NIPPENOSE OLD TOWN
MUNCY TOWN
INDIAN FORT
OTSTONWAKIN or FRENCHTOWN (MONTOURSVILLE)
NEOLEGAN'S CABINS
Lycoming Cr.
SHESHEQUIN PATH
TOWANDA PATH
CANOE PLACE (BLOSSBURG)
Tioga River
Cowanesque River
FORBIDDEN PATH
PASSIGACHKUNK
Canisteo River
GACHTOWAWUNK
PAINTED POST
ASSINISINK
NEWTOWN
NEW CHEMUNG
OLD CHEMUNG
WILLAWANNA
TUTELO TOWN
QUEEN ESTHER'S TOWN
TIOGA (ATHENS)
SHESHEQUIN (ULSTER)
Sugar Cr.
OSCALUI and NEWTYCHANNING
Towanda Cr.
STANDING STONE
WYALUSING
Wyalusing Cr.
FRIEDENSHÜTTEN
GREAT WARRIORS PATH
OWEGO
HIAWATHA ISLAND
CHOCONUT
Susquehanna River
OQUAGE
APPLETREE TOWN (GREAT BEND)
TUSCARORA O.T.
COOKOSE
Mohawk Branch of Delaware R.
SHEHAWKEN
Popacton Creek
Delaware River
CUSHIETUNK (MILANVILLE)
OWEGO PATH
Lackawaxen Cr.
MINISINK PATH
Wallenpaupack Creek
Lackawanna
NEOLEGAN'S TOWN
TUNKHANNOCK
Tunkhannock Cr.
WYOLUTIMUNK
GREAT SWAMP
CAPOOSE MEADOWS (SCRANTON)
ASSARUGHNE or LACKAWANNA
ADJOUQUAY
UNAMI TOWN
MAHICAN TOWN
SHAWNEE LAKE
PAXINOSA'S TOWN
SHAWNEE TOWN
WYOMING (WILKES-BARRE)
WYOMING PATH
NANTICOKE
NUANSOLA
NUTIMUS' TOWN
WAPWALLOPEN
NESCOPECK
NESCOPECK PATH
CATAWISSA or LAPACHPETON'S T.
GLASSWANOGE
WYALUSING PATH
Muncy Creek
INDIAN FORT
CANASERAGE (MUNCY)
INDIAN FORT
NEOLEGAN'S CAMP
Fishing Cr.
WARRIORS SPRING
SHICKELLAMY'S TOWN
CHILLISQUAQUE
MUNCY TOWN
SHAMOKIN (SUNBURY)
Shamokin Cr.
Mahanoy Cr.
Mahantango Creek
DOUBLE EAGLE (KLINGERSTOWN)
Pine Cr.
Deep Creek
TULPEHOCKEN PATH
Schuylkill River
Little Swatara Creek
Swatara
TULPEHOCKEN (MYERSTOWN)
Tulpehocken Cr.
QUITTAPAHILLA (LEBANON)
Quittapahilla Cr.
ALLEGHENY PATH
PAXTANG PATH
CONOY TOWN
HARRIS'S FERRY
PAXTANG
SHAWNEE T.
Conodoguinet Cr.
CARLISLE
CONOY PATH
LETORT'S SPRING
Yellow Breeches Creek
FRANKSTOWN PATH
RAYSTOWN PATH
NANTICOKE INDIANTOWN
Conewago Cr.
CONOY TOWN (BAINBRIDGE)
DEKANOGA COLUMBIA
SUSQ. FORTS 1640-80 1630-40
OLD PETER'S ROAD
Conestoga Cr.
CONEWAGO (YORK HAVEN)
CAPT. BEAVER'S
CONEJOHELA
PEQUEA
Pequea Creek
GREAT MINQUAS PATH
MONOCACY PATH
Codorus Cr.
(YORK)
CONESTOGA
Octoraro Cr.
Brandywine Cr.
DELAWARE PATH
MINGUANNAN
M.D.
DEL.
Delaware River
QUEONEMYSING
FORT MANYUNK
FORT BEVERSREDE
SHACKAMAXON
OKEHOCKING
FALLS PATH
NITTABAKONCK
LENNI LENAPE PATH
Wissahickon Cr.
Neshaminy Creek
Perkiomen Path
Manayunk
Schuylkill River
MANANGY'S TOWN (READING)
SACONK
Lehigh River
JASPER QUARRIES
Tohickon Cr.
MINSI PATH
PAUNACUSSING
AQUETONG
MINNAHAW CHUNIK
WALK BEGAN HERE (WRIGHTSTOWN)
PECHOQUEOLIN
NOCKAMIXON
BETHLEHEM
LECHAUWEKINK (EASTON)
CLISTOWAKIN (MARTIN'S CREEK)
HOCKENDAQUA
CAPT. JOHN'S TN. (NAZARETH)
GNADENHÜTTEN
POCHAPUCHKUG
FORT ALLEN
WECHQUETANK
MENIOLAGOMEKA
WIND GAP
LOCUST HILL
SHADES OF DEATH
WYOMING PATH
GREAT SWAMP
PECHOQUEALING
MINSI PATH
MINISINK
Shohola
LEGEND
Δ Indian village or fort
▵ Indian camp or cabin
□ White man's fort
○ White man's town or stopping place
● Spring or salt lick
X Landmark
Indian path
River or creek
CONEMAUGH (JOHNSTOWN) } Indian name with modern name
T., TN. — Town
O. T. — Old Town

PREPARED FOR THE PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION
BY PAUL A.W. WALLACE, 1952; REVISED, 1954

ment number of the _Journal_ in order to give adequate coverage to reports of local societies and individuals, bibliographies of recent publications, reports of meetings, and other matters of interest which require more space than is available for them in an ordinary number of the _Journal_. The publications of the American Folklore Society are the most important means by which persons interested in many phases of the American scene keep track of current developments in American Folklore, and are indispensable for the notices of books and articles which they carry.

John Witthoft
Pennsylvania State Museum
Harrisburg, Pennsylvania

Inquiries and applications for membership should be sent to:

Dr. MacEdward Leach, Secretary-Treasurer
Bennet Hall
University of Pennsylvania
Philadelphia 4, Pennsylvania

THE AMERICAN FOLKLORE SOCIETY

The American Folklore Society, founded in 1888, is our national organization of persons interested in folklore of the American scene, both White and Indian. Membership is open to all interested individuals and institutions (Regular Membership, $5.00 per year; Husband and Wife Membership, 6.00; Student Membership, 3.50; Life Membership, 100.00). The Society publishes a quarterly journal, The Journal of American Folklore, which carries original articles on American folklore, folklore studies of other parts of the world, book reviews, notices of other publications pertaining to folklore topics, and notices of events and affairs of interest to American folklorists. It also publishes a Memoir series which is distributed to members, and a Bibliographical Series which is sold to members at special rates. The Society also holds annual meetings with papers, symposia, and other less formal activities, and participates in a number of other folklore activities, such as the Annual Folklore Institute at Indiana University, International congresses pertaining to Folklore interests, and is closely associated with the various regional and state Folklore societies in this country, and publishes pertinent notes on their activities and meetings. During

Because of the great interest aroused by the article on the Indian trails of Pennsylvania written by Dr. Paul A. Wallace and published in Vol. XXIII - Nos. 3-4 of the PENNSYLVANIA ARCHAEOLOGIST, we have asked Dr. Wallace to prepare the enclosed map as a supplement to his article. It is suggested that the map be removed from the present issue of the magazine and preserved together with the Dec., 1953, issue in which Dr. Wallace's interesting study appeared.

Pennsylvania
Archaeologist

Bulletin of the
Society for Pennsylvania Archaeology

MEMBER OF THE EASTERN STATES ARCHEOLOGICAL FEDERATION

Society for Pennsylvania Archaeology

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407 Phillips Street
Aliquippa, Pa.

George Washington And The Wisconsin Glacier, 1753

By

PAUL A. W. WALLACE

On Friday, November 30, 1753, George Washington and his guide, Christopher Gist—well accompanied for forest travel by the Seneca Half King (Tenacharison), Jeskake, White Thunder (*alias* Tohashwuchtonionty, the Belt of Wampum), Guyasuta ("the hunter"), an interpreter and some woodsmen—left Logstown on the Ohio by an Indian path for Venango on the way to Fort Le Boeuf, and plunged into one of the most engaging mysteries in American historical scholarship.

They emerged safely on December 4 at Venango (Franklin), quite unaware of the puzzle they had left behind them for historiographers of the future to dispute over. There was no concealment. Washington on his return made a map of the journey. Both Washington and Gist left journals. Yet scholars have been unable to reach any agreement on the route the party followed. All is question and conjecture. Did they go by way of Zelienople (to use modern names) or of Evans City? Did they cross Connoquenessing Creek at Hazen, Fombell, Harmony, or Harmony Junction? Did they ford Muddy Creek at Isle? Did they cross Slippery Rock Creek at Crolls Mills, Doughertys Mills, the Pines, "Washington's Crossing," or Keisters? All these questions reflect variations of what we might call the orthodox school, which puts its faith in a route roughly following what came to be known as the Venango Path through Butler County. Or did Washington's party, as some believe, take a more westerly route, crossing Slippery Rock Creek at Wurtemberg and proceeding north through Lawrence and Mercer Counties?

In defense of this latter route, the Hon. W. Walter Braham of New Castle has recently published an admirable article, "From Logstown to Venango with George Washington."[1] The thesis there presented is that from the Wurtemberg ford near Ellwood City Washington proceeded north (by some not clearly defined route) to a crossing of Neshannock Creek in the vicinity of Volant and thence to Venango by way (possibly) of Mercer.

The present article proposes a new solution to the old puzzle. It will be shown that there was an Indian path, intermediate between the two routes already mentioned (the Venango Path to the east and Judge Braham's to the west), which passed the sites of modern Zelienople, Harmony, Portersville, Portersville Station, West Liberty, Harrisville, and Wesley. It is contended, further, that George Washington's party used that path because it was drier and more suitable for travel during the rainy fall of 1753.

Not all of the route proposed here is new. It is only the section from Harmony to Harrisville (perhaps, more strictly, from Portersville to the crossing of Slippery Rock Creek beyond West Liberty) that does any violence to the orthodox school of thought. The villain of the piece is the Wisconsin Glacier, as will be shown in due course.

In any close study of Indian paths, the most useful primary sources are usually found to be maps, travelers' journals, the terrain itself, and popular tradition. Material in abundance from all these sources has contributed to the present study. The two latter, terrain and popular tradition, may call for a little explanation.

---

[1] **Western Pennsylvania Historical Magazine,** Sept.-Dec., 1953.

The land across which a trail ran may be studied by means of contour maps, geological reports, photographs, or a pair of legs supplemented by automobile tires. In any case, direct knowledge of the terrain is essential. Even the best contour maps do not show, for instance, where the lesser swamps lie nor where the mountain laurel warns the pathfinder of lush undergrowth and bad walking. Aerial photography lays bare many of the secrets of the landscape, but such photographs as are available do not show changes, with the weather, of wet and dry. They do not tell where, two hundred years ago, the game was plentiful and where it was not (it has been said that use of the Great Shamokin Path was given over by most travelers because the game had become scarce in the territory through which the trail passed). Modern photographs cannot show where tornadoes in old times blocked the normal path with fallen trees and so compelled wide detours. Contour maps and aerial photography are essential tools to the researcher, but they do not dispense with the need of field work and personal observation. Many a route that looks feasible on the map will be found, when one follows it on the ground, to be vitiated by small swampy patches or an abundance of invisible springs that keep the ground soggy. Dry travel was a strong desideratum in the Indian country. On the other hand, terrain that looks precipitous on the contour map may be found by observation to be blessed with so good a creek crossing (one with firm banks and a sound bottom) as to make it worth the Indians' while to do a litle scrambling to reach it.

When we mention popular tradition ("oral history") as one of the pathfinder's primary sources, we are not contending that the voice of the people is the voice of science, nor that the best way to settle an historico-geographical problem is to put it to popular vote. The word "popular" is used here to denote *folk* lore as distinct from *book* lore: information, that is, derived not from books and periodicals but from the memories of people on the countryside whose parents and grandparents had told them about the days when the old trails were still in use and may even have shown them where the Indians passed over land that has since been ploughed. In folk tradition the researcher may expect to find some chaff mixed with the wheat. But, if he has the patience to bruise his knuckles with knocking on farmhouse doors and to weary his tongue with repeated questioning, and if, moreover, he uses discrimination in sifting the materials he has thus acquired, he will find himself in possession of more exact information from this source than he can get from most of the published books on local history.

In the course of the present study of Washington's path to Venango, I have interviewed well over a hundred people. Wrong leads, derived from printed matter or from my own untested theories, were quickly exposed when local tradition yielded a consistently negative response. When you comb a neighborhood for old-timers, as I have done, and found not one of them to have heard of Indians or Indian paths in the locality, you may be sure you have lost the scent. But when you come upon someone whose eyes flash, despite his ninety-plus years, as he says, "I can tell you *all* about the Indians round here. My grandfather . . .," then you know the scent is fresh and the game is afoot.

The first exhibit in our case for the Butler County route through Portersville is Washington's map, of which we have two versions, each of which is thought by some to be Washington's original. We need not enter here into the arguments concerning their authenticity. The two maps agree on what I take to be the essentials, which are these:

1. That Washington's party turned sharply from the Ohio at an Indian village known as the "Mingo Town," somewhere between Logstown and the mouth of Beaver Creek. We know of two historic Mingo towns near Logstown: one named for "the Crow" and the other for Logan, both Ohio-country Iroquois or "Mingoes," in the parlance of that day. The first of these towns was in the vicinity of the modern Conway; the second, at Rochester. Which of these places, or whether either of them, was called Mingo Town in 1753, we do not know.[2]

2. That from the Mingo Town to Venango they followed a course slightly to the east of north, the only variation being a bend still more eastwardly for a short distance at the crossing of the first tributary of the Beaver noted on the map, and, following that, a correction bearing north for a few miles before swinging back to the general N. N.E. course.

3. That, soon after passing the second branch of the Beaver shown on the map, the course leaned gradually (there was no sharp turn) toward the east, and maintained that tendency until, approaching Lacomick (Sandy) Creek, it bore north for the creek crossing and then swung east again for Venango.

We observe that on both maps the course of Beaver Creek, from the Kuskuskies to its mouth, is traced quite inaccurately, a circumstance that indicates Washington was only roughing it in from hearsay. We should not, therefore, take too literally Washington's delineation of anything he did not see for himself. We cannot trust what the map shows us of the path *in relation to things he did not see,* such as its distance at any given point from Beaver Creek. We can, however, trust the map in showing the actual direction of the path, and also the direction in which the several branches of the Beaver were flowing *at the places where he crossed them.* We should expect him to be reliable in his compass readings, for he was not only an experienced traveler but also a professional surveyor who had brought a compass along with him.

It will be observed that the route proposed here for Washington's path closely approximates the courses shown on the map.

In the journals of Washington and Gist I find three things important to our inquiry:

The first is the Half King's report, as Washington records it in his entry for November 25, that "the nearest and levellest way [to Fort Le Boeuf, the present Waterford] was not impassable, by Reason of many large mirey Savannas," and that they must, in consequence, go round by way of Venango.

The second is Gist's estimate of the miles covered in each day's travel: 15 the first day to "Murtheringtown" at a creek crossing; 30 the next day to another creek crossing; 22 the third day to the crossing of one of the head branches of Beaver Creek; and 15 the fourth day to Venango.

The third is the fact mentioned by Gist

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[2] "Journal of George Croghan," **Pennsylvania Magazine of History and Biography,** LXXI, 351, Sept. 12, 1759, Pittsburgh: "The Crow with about 26 Indians of the Six Nations . . . acquainted me that they intended to settle at the mouth of Beaver Creek." Does that mean that Crow and his retinue were moving from the Conway to the Rochester site? In September, 1772, David McClure wrote in his **Diary** (N. Y., 1899, p. 56): "Came to the Mingo village on Bever Creek. . . . This village is commonly called Logan's Town." Although Thomas McKee has an entry against James Logan for August 3, 1754, in his list of debts of Indians on the Ohio (Kenneth P. Bailey, **Ohio Company Papers** Arcata, Cal., 1947, p. 161), we know that in May of that year James Logan was certainly living at Shamokin, where Conrad Weiser talked with him.

that they camped the second night at a ford where the path from Kuskuskies to Venango crossed a large creek.

Taking these in order, we learn from the first item that the "nearest and levellest Way" from Logstown to Fort Le Boeuf did not go through Venango. They had to go out of their way and round by Venango in order to avoid the swamps and flooded areas of the more direct route. A glance at the contour maps will show that the nearest way from Logstown to Fort Le Boeuf would be a comparatively level route by way of the present towns of Mercer and Meadville, and from the latter place down the path paralleling French Creek. There may have been such a path—not directly to Meadville (the Conneaut Marsh would have made that impossible), but reaching French Creek a little south of the mouth of Conneaut Outlet. Following hints in Judge Braham's article, I examined a possible route from the Wurtemberg ford past Energy, Volant, Mercer, and round the end of Sandy Lake, where the swamp comes to a convenient bottleneck in Wildcat Hollow. It is passable in dry weather. But neither this route, nor, still less, the route south of Sandy Lake suggested by Judge Braham, would be other than discouraging in wet weather. As far as my inquiries have gone, there is no local tradition of a trail by this route. I discount the information given me by a man north of Volant, who had heard that Washington came up highway 19 and spent the night at a hotel in Mercer.

On Lewis Evans' map of 1755, a path is shown, less direct than the hypothetical one we have been discussing, but level enough, running from the mouth of the Beaver to Kuskuskies (New Castle) and thence to Shenango (West Middlesex). From there it is shown turning east to Venango. From the point of turning shown on the map, there is known to have been another path to the mouth of Conneaut Outlet. Bishop Roberts in 1796 traveled part way over it: "an old Indian path called the Kuskuskia Path, and leading from Cassewago to Kuskuskia, a place on the Beaver River."[3]

But these were not trails for a wet season. That the country they traveled was afflicted by "mirey Savannas," a glance at the contour maps will confirm. And even the contour maps do not tell the whole story. If you travel north through Lawrence and Mercer Counties today, you will find even the uplands pock-marked with little swampy patches, too small to be shown on a map, but sufficient in wet weather to try the patience of the best woodsmen.

It is at this point that the Wisconsin Glacier enters our story. At one time it covered most of Lawrence and Mercer Counties, grinding down the hills with boulders compressed under millions of tons of ice, and gouging out little saucer-like hollows everywhere. On its retreat, some twelve thousand years ago, it left behind it "a difficult terrain of swamps and marshes."[4]

But the retreating glacier, though it had ravaged the country and made it unhealthy for Indian paths, bequeathed to man a remedy to use at his discretion. The terminal moraine of the Wisconsin Glacier runs south from Harrisville to the town of Slippery Rock and thence in a general southwest direction, crossing Muddy Creek at Portersville Station. If we turn our attention to this moraine, which Dr. Frank W. Preston of the Preston Laboratories at Butler has traced with precision, and to the country east of it, we shall find a terrain very different from the marshland to the west. East of the moraine the land is more hilly but better drained. It was through this country that the famous Venango Path came north from the Forks of the Ohio. But, let us observe, even the Venango Path inherited a legacy of troubles from the Wisconsin Glacier. As it came farther north and approached the glacier country, it ran into the ponded deposits and crossed flat-bottomed, easily-flooded valleys where ancient lakes had been formed by the ice-dammed streams.

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[3] Charles Elliott, **Life of the Rev. Robert R. Roberts** (N. Y., 1844), pp. 37-38.

[4] Dr. Frank W. Preston, "The Glacial Foreland," **The Ruffed Grouse** (Audubon Society, No. 2, 1948), pp. 6-17.

It is the significance of Washington's path that, in that wet season of November-December, 1753, it avoided both Scylla and Charybdis, the marshes to the west and the glacial silt to the east. In other words, the Half King's party kept on, or close to, the eastern edge of the terminal moraine.

Let us look at the situation with the eyes of a geologist. "In many places," writes Dr. Preston in a letter to me of April 20, 1954, "the ice was up against ponded water and the outwashes are quite extensive; but the point is that the outwash close to the ice is gravel and sand and good walking, whereas a mile or two away from the ice you get nothing but fine silt and clay which extends for perhaps ten miles to the east and makes the going pretty sticky."

For a little time at the start of this inquiry, before the Wisconsin Glacier had appeared on the horizon, I tested the hypothesis that Washington's path crossed Brush Creek somewhere between Conway and Evans City (probably in the vicinity of Ogle), joining the Venango Path at the latter place and continuing with it to the south of French Creek. But the evidence was against it. For one thing, records gathered by Dr. William J. Mayer-Oakes, Field Archaeologist of the Carnegie Museum, failed to indicate ground evidence such as is usually turned up at Indian fords. For another, special research undertaken in connection with the present study by Vincent R. Mrozoski, Secretary of the Society for Pennsylvania Archaeology, and by his co-worker, Emil Alam of Aliquippa, failed to indicate any fords where the hypothetical trail called for them. Further, when I traveled up the Franklin Road, which follows pretty well the old Venango Path, I found the crossing of Muddy Creek at Isle on a rainy day very unpromising. "The valley is so flat that it floods at the slightest provocation," writes Dr. Preston. "Not a single building in all its length is built on the present floor of Muddy Creek."[5] I could not believe Washington's Indian friends would have led him into such a mess. They must have taken another path and crossed Muddy Creek somewhere else.

There was a path, we know, that ran from Logstown to Harmony and then on to Prospect. James Vale Downie proposes this latter as Washington's route.[6] But Prospect is on the Venango Path south of Isle. If Washington had gone that way, he would again have had to use the flooded half-mile crossing at Isle.

The terminal moraine of the Wisconsin Glacier provides a solution to this last problem, how to get across Muddy Creek. At Portersville Station the moraine provides an excellent ford. Here, where highway 488 crosses the creek, are firm banks and a good creek bottom. "At the Portersville Station," writes Dr. Preston, "the creek is down on Connoquenessing sandstone, and you couldn't want a better foundation. The approaches are a little steep; but perhaps before the white man came, you could skirt along the hillside to the east and reach the creek bed more easily. At any rate, it presents no real problem for a man on foot or horseback. The main objection is that the creek is very narrow in the gorge so that in times of flood the water is on the deep side. Normally the crossing is very easy. In any case, you don't get stuck in the mud."

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[5] **Ibid.**

[6] James Vale Downie, "Murtheringtown," **Geneva Alumnus,** Jan.-April, 1954.

The crossing is just where the creek narrows, with slack water above and no waterfall below, so that there would be no great danger here even in time of flood. This is not a rocky gorge like that of the Slippery Rock at McConnell's Mills, where a man would be dashed to pieces if he tried to ford.

There is a strong local tradition of an Indian trail running from this crossing of Muddy Creek to West Liberty, where trails fanned out to several neighboring fords of the Slippery Rock.

Once across Muddy Creek on the way north, the present dirt road (which I take to follow the old trail fairly closely) leaves highway 488 and veers off somewhat toward the east, passing what appears to be an Indian camp site on the McDaniel farm, climbing a hill, running along the top of the ridge for a little distance, and then coming down into the valley of Hogue Run. I have been told by oldtimers that this is a dry valley, suitable for a year-round path. The grades are easy, and the path would have no trouble in keeping out of the wet valley bottom without running into steep sidehills.

On the road near the head of Hogue Run, I met Mr. Harry Carothers, who has lived a long life in these parts. "My grandfather told me this was once an Indian trail," he said, volunteering the further information from the same source that Indians used to pass this way going north by way of West Liberty to the ford of Slippery Rock at Crolls Mills and on to an Indian "reservation." Asked if this was at Cornplanter, he responded with a "Yes." Where these Indians came from he did not know. Mr. Oliver Ralston of Slippery Rock, R. D., remembered being told that Indians used to come over this path from Kuskuskies.

What crossing of the Slippery Rock Washington used might "admit of a wide solution," there being many good fords in the neighborhood of West Liberty. The Crolls Mills ford is probably the easiest, but it might not have been the best when Washington came that way. The bank on the north side floods too easily. It may be, as Harry Carothers assured me, that in the old days the north bank was higher. Be that as it may, there were other good fords at hand which old trails made available to Washington if he wanted to use any one of them. It is not unlikely that Washington and his party rode up to Slippery Rock ford at Dougherty's Mills, perhaps on farther to the Pines, or to the ford now known as "Washington's Crossing." This last ford is rather deep, but it has good banks, a good foundation of sand and rock, and a strong local tradition that it *is* where Washington crossed. It is not the ford which Douglas Southall Freeman and many other writers assign to him. They would have him cross at Keisters, higher up, where highway 8 now crosses, south of Branchton. The problem is not important to us here. It is enough for us to know that there were several good fords around here for Washington to choose from. What concerns us is what Washington's path did with itself after it had got over the creek.

According to two local residents whose families have lived here for generations, Oliver Ralston and Hiram Grossman—the latter of whom, though ninety-eight years of age, has a keen memory of things learned from his grandfather in childhood —, the trail, after fording the creek, ran beside it for some distance to the Bend, and then joined what we know as the Franklin Road south of Forestville. Probably one branch of the trail did actually go that way. Dr. Preston, on the other hand, thinks the trail rode the terminal moraine (which lay several miles west of Forestville) most of the way from West Liberty to Harrisville and Wesley, passing the town of Slippery Rock on its way. Probably he is right, too: one branch did use the moraine. The Indians, it must be remembered, often used alternate trails for dry and wet seasons. On this occasion Washington would almost certainly use the path intended for a wet season, and follow the terminal moraine. In that case his proper crossing place of the creek would have been at Croll's Mills. It is not an unreasonable conjecture that Washington and his party had planned to use the easy Crolls Mills ford, but had found themselves compelled by the flooding of the north bank to go to another crossing upstream; that they then had doubled back to get on to the moraine again somewhere in the vicinity of what is now the town of Slippery Rock. Such a maneuver would explain the apparently excessive mileage in Christopher Gist's account of the second and third day's travel.

What we have accomplished so far is to make plain that there was an Indian path by way of Harmony, Portersville, Portersville Station, and West Libetry to Venango. That much is certain. But is it any more than conjecture that Washington followed it?

It has already been noted that the compass courses shown on Washington's map correspond closely, except for minor twists and turns, with those of the path I have described—more closely, I believe, than that of any other path that has yet been proposed for Washington's journey. But there is additional evidence. It derives from certain details contained in Gist's itinerary: his estimated distances and some items of description.

"Friday, 30th [November] We set out [from Logstown] and the half King and two old men, and one young warrior, with us; at night we encamped at the Murthering Town, about 15 miles, on a branch of great Beaver creek, got some corn and dried meat."[7]

It is, as well as I can measure it, about thirteen and a half miles by trail from Logstown *via* the present Rochester (where Logan's "Mingo Town" was situated) to Unionville on Brush Creek, a branch of the Beaver. According to Vincent Mrozoski, there is an Indian camp site on the south side of the old Brush Creek (the stream has been given a new channel) a few hundred yards north of Unionville. A few triangular points have been found here, indicating that the Indians used this camp in late prehistoric or possibly historic times.

The name of Murdering Town gives no clue to its location, since no other travelers refer to any town by that name. The explanation of the name usually given is that it was coined by Washington and Gist because an Indian from that town had, on their return from Fort Le Boeuf, shot at them somewhere in the same neighborhood. I would suggest another explanation. There was in the Ohio region at about this time an Indian known among the traders as "the Murderer" or "the Murdering King."[8] May not the town have been named after him? It would follow good Indian precedent: Crow's Town, Shannopin's Town, Custaloga's Town, Queen Aliquippa's Town.

If Washington left the Ohio River at

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[7] See "Journal of Mr. Christopher Gist . . . "in **Massachusetts Historical Collections,** Third Series, V, 101-108 (1936). Communicated by James Mease, M.D., of Philadelphia, who obtained it from Judge Shippen of Franklin, Venango County. The extracts printed here are taken directly from Dr. Mease's manuscript version, by courtesy of the Massachusetts Historical Society.

[8] Kenneth P. Bailey's **"The Ohio Company Papers, 1753-1817** (Arcata, Cal., 1947), pp. 94 and 132.

Crow's Town, or that vicinity, and proceeded directly to Zelienople, crossing Brush Creek about a mile and a half below Unionville, he would reach what is known locally as "Washington's Spring" in the outskirts of Zelienople in about fourteen miles, and the crossing of the Connoquenessing at Harmony a mile farther on, making the day's journey fifteen miles, which is what Christopher Gist said it was.

There was a path from Kuskuskies to Venango that crossed Slippery Rock Creek at Croll's Mills or Washington's Crossing. Local tradition is strong on that point. The path, coming from Kuskuskies, first crossed the Slippery Rock at Allen's Mills, which is about a quarter of a mile above McConnell's Mills. The descent to the creek there is rather steep and the ascent on the east side still steeper. On the contour map, indeed, the east bank looks all but impossible, because of the rock wall that confines the creek. But the rock wall has a break at this point which allows a path to approach the water without difficulty. The ford itself is good, with a rock foundation and water that is comparatively still and shallow.

If you wonder why the path from Kuskuskies should cross Slippery Rock Creek at all—and cross it twice, first at Allen's Mills and again at Croll's Mills—instead of taking an easier route a little to the north of that stream so as to avoid it altogether, take a look at the swamps of Wolf Creek, which comes into the Slippery Rock from the north, and you will be satisfied. A study of the terrain substantiates the local tradition.

Judge Braham has a good point when he draws our attention to the fact that Washington on his map shows the second creek (presumably the one at which he met the path from Kuskuskies) flowing into the Beaver *at Kuskuskies.* Slippery Rock Creek, as a matter of fact, enters the Beaver some miles below. It is the Neshannock that enters the Beaver at Kuskuskies. But we must remember that Washington had not been to Kuskuskies, and had no personal knowledge of the topography involved. We have noted already that he was in error in tracing the course of the Beaver, making it flow southwest instead of southeast. A further error in supposing Slippery Rock Creek to enter the Beaver at the Kuskuskies (where no doubt he had heard three large creeks united) seems under the circumstances not out of the way.

The distance, as well as I can compute it, from Unionville to Croll's Mills was twenty-five miles and a half; to Washington's Crossing, twenty-seven miles. Gist says they traveled thirty on that day. From Harmony the distance would be about twenty or twenty-one and a half. Is it possible that Dr. Mease, in making his transcript from Gist's journal, mistook a 2 for a 3? Or was Murdering Town at the crossing of Brush Creek?

Sunday, December 2, being a rainy day, Washington stayed in camp.

"*Monday* 3.^{d} *Dec.* We set out and traveled all day, encamped at night on one of the head branches of great Beaver creek about 22 miles."

The words "one of the head branches of great Beaver creek" suggest a very small stream, as, indeed, it would have to be whatever route he took, being within fifteen miles of Venango and therefore close to the divide between the Allegheny and Beaver drainage. If you travel up that way by highway 8, which here follows the old Franklin Road and Venango Path, you will find, about three quarters of a mile below Wesley, that you will come across a busy little run at the head of Wolf Creek, which is a tributary of Slippery Rock Creek and therefore of the Beaver. The stream here is small enough to step over, but it is a self-respecting rivulet nevertheless, moving with gusto and headed in the right direction. Its banks are dry, sheltered, and suitable for camping. From the Croll's Mills crossing to this place is, as well as I can figure it out, about seventeen miles, if the trail ran, as some oldtimers say it did, close by the west bank of Slippery Rock Creek to meet the Venango Path south of Forestville. But if, as Dr. Preston believes, Washington's path followed the terminal moraine through the town of Slippery Rock, it must have done some twisting and taken several miles more, bringing the distance close to Gist's figure:

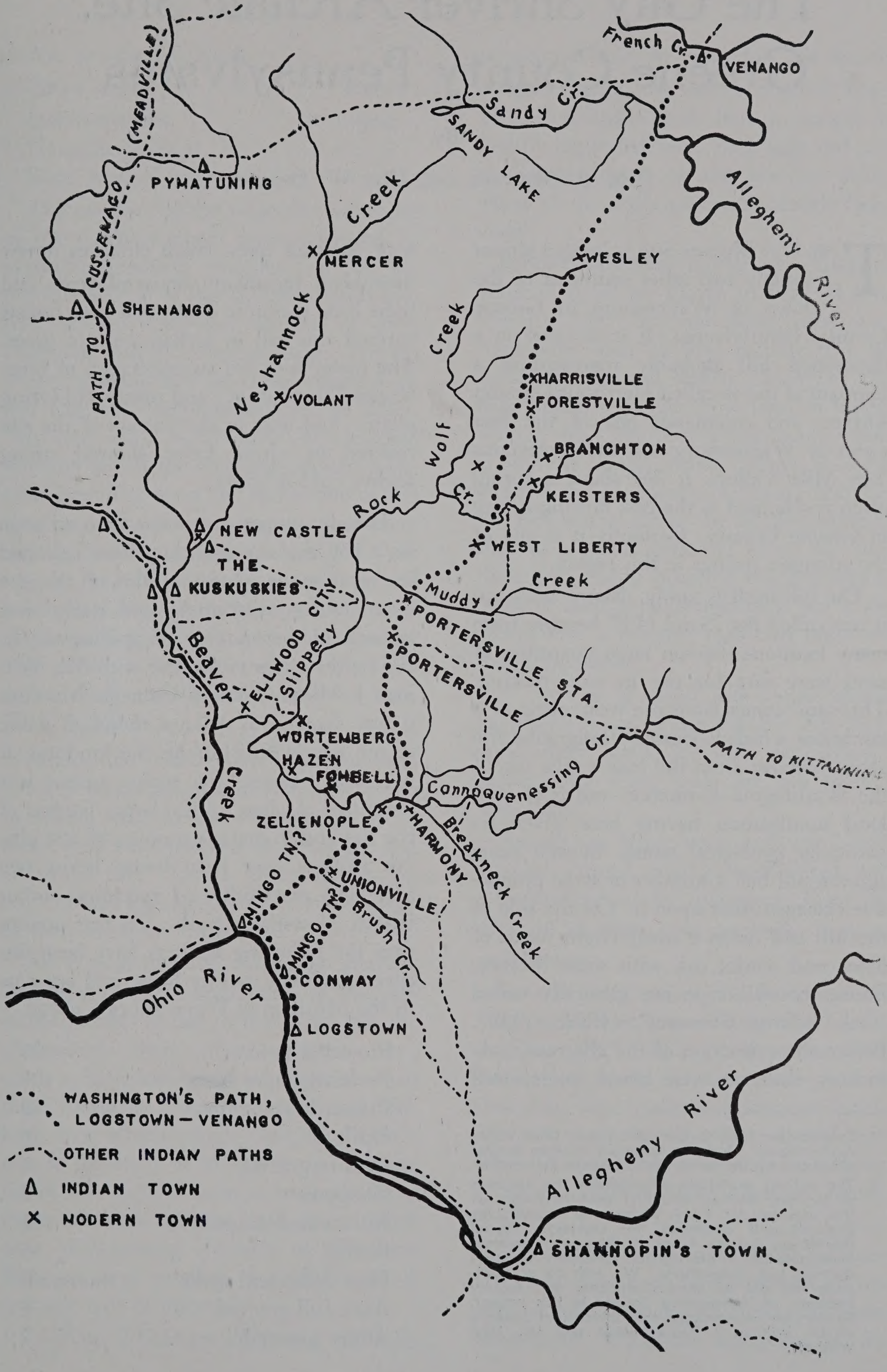
"Tuesday 5.th Set out, about 15 miles, to the town of Wynango. . . ."

There is no problem here. The distance from the last camping place below Wesley to Franklin is about fifteen miles and a half.

To sum up: There was an Indian path from Logstown through Zelienople, Harmony, Portersville, Portersville Station, West Liberty, Harrisville, Wesley, to Venango. It was a dry path, making use of the Wisconsin moraine, and therefore particularly convenient in wet weather. The fords on this path were excellent, especially at the crossing of Muddy Creek. The route is supported by a strong body of popular tradition. The distances correspond (except possibly for the second day) pretty well with Christopher Gist's. The crossing of Slippery Rock Creek by the path from Kuskuskies to Venango has been identified. The courses agree with those on Washington's map.

If we have, in this anniversary year, contributed to the solution of the Logstown-Venango mystery, let us pay tribute to the Wisconsin Glacier, which, whatever ravages it may have committed in Lawrence and Mercer Counties, was certainly, through its terminal moraine, a boon to Butler.

"In the days of the Redskin," writes Dr. Preston, ". . . the land immediately to the northwest of his trail was a difficult terrain of swamps and marshes, where the glacier had been; to the southeast lay the drier lands, sculptured gently since the post-Cretaceous uplift, trenched more deeply as, during the Ice Age and after, the hanging valleys cut back from the Allegheny, and complicated by the deep ponded deposits of Muddy Creek. On both sides of his trail was forest—the forest that had followed on the heels of the retreating ice, driving before it the musk-ox and the barren-ground caribou. In their place had come the moose and elk and buffalo, the squirrel to plant the trees, and the beaver to cut them down."


French Cr.
VENANGO
Sandy Cr.
SANDY LAKE
Allegheny River
(MEADVILLE)
PYMATUNING
CUSSEWAGO
PATH TO
Creek
MERCER
WESLEY
SHENANGO
Neshannock
Wolf Creek
VOLANT
HARRISVILLE
FORESTVILLE
BRANCHTON
KEISTERS
Rock Cr.
NEW CASTLE
WEST LIBERTY
THE KUSKUSKIES
Muddy Creek
ELLWOOD CITY
Slippery
Beaver
PORTERSVILLE
PORTERSVILLE STA.
PATH TO KITTANNING
WURTEMBERG
HAZEN
FOMBELL
Connoquenessing Cr.
Creek
ZELIENOPLE
HARMONY
Breakneck Creek
MINGO TN.?
UNIONVILLE
Brush Cr.
MINGO TN.?
CONWAY
Ohio River
LOGSTOWN
Allegheny River
SHANNOPIN'S TOWN
WASHINGTON'S PATH, LOGSTOWN — VENANGO
OTHER INDIAN PATHS
Δ INDIAN TOWN
X MODERN TOWN

The Gay Shriver Archaic Site, Greene County Pennsylvania

By

Paul R. Stewart and Don W. Dragoo

The Gay Shriver Site is located almost exactly two miles southeast of the town of Waynesburg in Greene County, Pennsylvania. It is situated on a flat-topped hill probably representing a remnant of the so-called Harrisburg erosion surface, and commands one of the best views of Waynesburg and the contiguous Ten Mile Valley. It lies above a spring often proclaimed as the best flowing spring in Greene County. Certainly it is one of the strongest springs in this region.

The hill itself is sandy. Many years ago it was called the "Sand Hill" because from many locations thereon large quantities of sand were dug for use in road making. This sand comes from the weathering of a sandstone which is located stratigraphically about halfway from the base to the top of the Washington Formation and is of only local significance, having been given no particular geological name. Several years ago the hill had a number of large productive chestnut trees upon it. On the side of the hill still exists a small virgin forest of black and scarlet oak with some hickory. Forests of this type are generally called "Oak-Hickory Climaxes" (Illick, 1928). Before the extinction of the chestnut, oak-hickory climaxes were often interspersed with chestnut trees. Such climaxes renew themselves for many thousand years and there is no reason to doubt that such forests covered this hill in archaic culture times. The forest floor has an association of blueberries (Vaccinium) and other acid-loving plants. Soil tests in the portion of the site covered by virgin forest showed strong acidity (pH 4.5-5.0).

The site proper covers less than an acre. As a boy the senior author often searched for arrowheads when portions of the site were under cultivation and early was amazed at the number of specimens. In 1951 after a trip to the site with Mr. William J. Mayer-Oakes of Carnegie Museum it was decided to make a thorough study of the material. Through the kindness of Mr. Gay Shriver, the senior author was permitted to plow up the larger portion of the site and to make a number of test pits. No artifacts have been found below two feet, and practically all specimens occur within plowshare depth. To the present time the following artifacts have been discovered, chiefly surface finds, and are now in the Museum at Waynesburg College.

Projectile points	690
Projectile point bases	104
Projectile point tips	48
Drills	16
Drill fragments	7
Choppers	3
Knives and scrapers	156
Blanks	55
Flint flakes and spalls	thousands
Axes, full grooved	2
Adzes, grooved	2

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2. The authors gratefully acknowledge the kindness of Mr. Gay Shriver, who first permitted work at this site, and Mr. Frank Bryan, who acquired the property and continued the courtesy. Special thanks are due Mr. Frank B. Giles, who rendered invaluable aid in making the collection and conducting test excavations. We wish to acknowledge the aid of various students and faculty members of Waynesburg College in this project. Finally, we acknowledge the advice and opinions of Dr. William J. Mayer-Oakes and Mr. John Witthoft.

Axe or adze fragments	3
Pitted stones	many
Hammerstones	many
Hematite, worked	3
Slate, worked fragments	5

The majority of the projectile points are of the corner-notched, corner-removed, or expanded-stemmed varieties. It is extremely difficult to classify these points into well defined categories because of their crudeness and inconsistent shape. For example, a point may be corner-notched on one edge and side-notched on the other. Any one point could easily be classified into any one of the above mentioned varieties depending upon the inclination of the classifier. The largest points are no more than 2 inches long and most are less than 1½ inches. It is not uncommon to find points less than 1 inch long. Many of these small points are quite blunt while others have a well defined tip. Most are rather thick and nearly as wide as long. (Plate I-A.B.)

Among the minor point types the side-notched points are most numerous followed by those with stems. Pentagonal, bifurcated, and basal-notched points occur but are quite rare. (Plate II-I.) There are only 8 broad-stemmed and lanceolate points in the collection. (Plate II-F.)

An extremely wide variety of material was used in the manufacture of the projectile points. In fact, it is notable that the chalcedony, chert, jasper, quartzite, etc., cover a far wider range of materials than those found on Late Prehistoric and Historic sites which adorn some of the hilltops to the south of Waynesburg. A number of the artifacts seem to be made of an extremely poor quality dark chert found near Waynesburg. Outside of this local flint, no large number of artifacts are of any one type of material.

In Plate II-C,D are illustrated the drills or perforators in the collection. Of the 16 unbroken drills, 10 have a notched base. The remaining 6 drills have a straight to slightly expanded base. Both side and corner-notches occur on the notched drills. Many of the drills are rather crudely fashioned.

Scrapers and flake knives are abundant. Some of these are shown in Plate II-A,B. Unspecialized chips and flakes were most commonly used in the manufacture of these scrapers and knives. Many of the flake knives resemble those used in Hopewellian times, but they are generally smaller and less finely made. Many of these scrapers show evidence of having been retouched several times. In the flint samples that have been gathered from the site, there are several hundred crude scrapers. Some of these show considerable use while others were apparently used only once and then tossed aside.

A number of small leaf-shaped blanks have been found (Plate II-E.F). The largest of these blanks are little more than 2 inches long while some are less than 1 inch long.

Among the heavy stone tools are 2 full-grooved axes, 2 small-grooved adzes, and 3 broken axe or adze fragments (Plate III-A). All of these tools are badly battered and broken.

Several pitted stones and hammerstones have been found. Some of these are shown in Plate III-B. The pitted stones differ from those found on many later sites in that they were made from angular blocks of sandstone rather than from smooth pebbles. Some of the hammerstones are crudely shaped spheres while others are merely pebbles.

No pottery, bone implements, or bone fragments have been found; and only a few tiny fragments of mussel shells have been discovered. With the exception of five slate and three hematite fragments, no ornaments have been found.

Several excavations have failed to uncover any true fire pits or other sub-surface features. Scattered over almost the entire site, however, are stones showing evidence of firing.

ECONOMIC GEOLOGY OF 36GR11

We have already mentioned the immense variety of materials entering into the manufacture of artifacts found upon the Gay Shriver Site. The nomadic groups which periodically occupied this site were in their own way well trained economic geologists. Just as our American culture of the present day tests geologic materials—building stones for weathering resistance; rocks for crushing strength; materials which will accept a high polish; tests for hardness, abrasive power, etc., so the archaic Indians using their own primitive methods made the same tests. Just as our prospectors seek for new materials, no doubt did ancient man send out his prospecting parties.

On the Gay Shriver Site we found an immense amount of well-chosen chert, chalcedony, jasper, flint, etc., very little of it showing much weathering after thousands of years. (See Plate II-G for weathered arrowheads.) So-called "flint" has been detected from the following categories: Flint Ridge material, Onondaga Chert nodules, Kanawha River black flint, purple and purplish brown material streaked with yellow, known from sites along the Monongahela River.

Several beautiful brecciated cherts were selected and used in making projectiles. One group of gray chert, the brecciation repair possibly manganese, has not yet been traced as to source. We have never seen this material in any other museum.

Another material used in the making of projectile points deserves mention. A local siderite coming from concretionary material or from altered laminae approximately 10 or 20 feet below the Waynesburg Coal, has, of course, been used extensively by many cultures through this region in the making of celts. In the museums they are almost invariably incorrectly labeled "Hematite altered to Limonite." Analysis shows it to be siderite with carbon and calcite inclusions. Experiments show that it takes a very high polish and a fine edge. On the Gay Shriver Site, however, seven arrowheads have been found *chipped* from this siderite and, of course, have been weathered deeply, altering to limonite.

In addition to the making of the projectile points, these Archaic people and the Adena, Hopewellian, and Fort Ancient cultures after them selected igneous rocks from which to make many of their tools. On this site, as upon later sites, the choice seems to have been diorites, syenites, and monzonites, among the phanerites, as opposed to materials like granite, which contained quartz crystals. The manufacturers doubtless discovered, as do modern monument workers, that the differential hardness caused by the presence of the quartz makes the material less tough and an edge of even hardness becomes difficult.

On the Gay Shriver Site the 7 axe and adze fragments show no aphanitic materials. Basalt is strangely absent although on many sites elsewhere basalt seems to have been one of the favorites due to the even texture. It is possible that the Archaic as well as other peoples liked the pattern of the syenites, diorites, and monzonites, just as the purchaser of a tombstone will choose such material in preference to the more somber basalts, or the more monotonous andesites, latites, etc.

As with modern exploiters of geologic material, shortages probably caused this archaic folk to utilize inferior flint. On Wisecarver's Run, approximately two miles northwest of Waynesburg, occurs a dark grey chert, poorly bedded and with very poor conchoidal fracture. A number of projectile points were manufactured from this material. This is in contrast to the later Woodland cultures of this area where little or no flint from this source appears to have been used.

Only two specimens indicating Laurentian slate have thus far been discovered. One is a portion of a tube or possibly of an atlatl weight; the other could be a knife. Laurentian slate in later periods, particularly the Hopewellian, became one of the most ornamental of the polished stone artifacts. Three fragments of local carbonaceous slate also have been found.

Discussion

With some conjecture we can reconstruct the village and portray the life of the inhabitants of the Gay Shriver Site. This site, although comparatively level, probably has been lowered by weathering a few inches, moving the artifacts downward a short distance. Chamberlin and Salisbury (1921, p. 84) estimate that the entire Mississippi Valley has been lowered approximately one-half foot in the past five thousand years. Granting that the top few inches of the site have disappeared since the occupation, we have so far found no deep refuse and fire pits, shelters or burials. Shelters were probably constructed of a light pole framework covered by bark and skins similar to the lean-to. Fires for cooking were built on the surface of the ground and banked by the stones which litter the site today. Refuse was not abundant and consisted mainly of bone which has since been destroyed by the acid soil. Life was simple and revolved around the gathering and hunting of food. There was little time for frills and the cultural elaboration which came in later times with the introduction of agriculture.

There is a great possibility that the inhabitants did not live on this site during the winter season. The absence of evidence for substantial houses and deep fire pits indicates that these people did not subject themselves to the cold winds which batter this hilltop during the winter. Very likely the inhabitants chose this locality for a summer residence because it was near a fine spring and upon a hill of sour sand where underbrush would not be rank. The chestnut trees along this and other ridges furnished them with considerable food. It is well known that wild pigeons and turkeys used such chestnut ridges as their roosting places and areas from which they gathered most of their provender. There would also have been abundant small game as well as deer, elk, and bear to add to the menu. During the months of late summer and early fall there would have been various types of berries and nuts to spice their food with variety. With the beginning of the cool days of autumn, the people probably began their movement to more sheltered areas. Some may have drifted southward to mingle with groups of different cultural and physical heritage.

These migrations and contacts with other groups would explain the immense variety of flint and other materials in the artifacts. The people would pick up small quantities of attractive pebbles and pieces from flint deposits in their wandering, manufacturing a few tools as needed, and bringing the remaining pieces of raw material back to the village to be worked into tools at their leisure. Just as new and different materials were added to the culture of these people so were new ideas and members. In time their whole way of life changed and the Gay Shriver Site ceased to exist.

Who were these people and how were they related to the early history of the upper Ohio Valley? The material culture of the Gay Shriver Site shares many similarities with the Brewerton Focus of New York state (Ritchie, 1944). This is especially true when the flint objects are compared. The thick, broad-bladed, notched and stemmed projectile points; eared notched points; bifurcated base points; pentagonal points; notched-base drills; flake scrapers and knives; and small leaf-shaped blanks are nearly identical in form with those found at the Oberlander and Robinson sites by Ritchie (1944, p. 235-249). There are a number of items from these New York sites which are unknown at the Gay Shriver Site. Important among these are the gouge and bannerstone. Concerning the absence of bannerstones at the Shriver Site it is of interest to note that the small projectile points so common on the site would indicate the bow had begun to replace the spear-thrower.

The material culture of the Shriver Site is also related to the Shell Mound Cultures of the Ohio Valley where the large lanceolate and broad stemmed points predominate (Webb, 1946). A few of these points have been found on the site. The full-grooved axe; the notched-base drills; and the flake scrapers and knives are very much a part of the Shell Mound Culture. The bulk of the materials of the Shriver Site, however, is more closely related to the Brewerton of New York than to the Ohio Valley Shell Mounds.

In Early Archaic times the people responsible for the shell mounds were in control of the upper Ohio Valley and a semi-sedentary food-gathering people (Lamoka Focus) related in physical type and culture occupied New York state (MacNeish, 1952, p. 48). In New York state the Lamoka culture was later superseded by the brachycephalic semi-sedentary food-gathering groups as represented by the Brewerton Focus. Spaulding (1946) has suggested that the Brewerton Focus and several related foci in the Northeast are linked with earlier circumpolar cultures of the Old World by sites having a similar cultural complex extending northwestward across Canada. These invaders from Canada not only became the dominant influence in New York state in Late Archaic time but also spread into the Upper Ohio Valley where they encountered the inhabitants of shell mounds. There is evidence to indicate that these two groups were in close contact. At a small shell mound (Globe Hill) recently excavated by Carnegie Museum's Upper Ohio Valley Archeological Survey in Hancock County, West Virginia, there appears a mixture of cultural elements in which both groups contributed about equally. At the East Steubenville shell mound a few miles south of Globe Hill there was little evidence of contact with the Brewerton folk (Mayer-Oakes, 1954). Contrast these two sites with the Shriver Site in which the Brewerton elements have become dominant and only vestiges of the Shell Mound Culture remain. The Shriver Site represents the closing phase of Archaic times in the upper Ohio Valley.

What happened to the Archaic Culture as represented at the Shriver Site with the advent of Adena and Hopewellian times? As the Adena-Hopewell culture spread into the upper Ohio Valley there is considerable evidence that Archaic Culture formed the base upon which these new ideas of life and death were engrafted. Many of the cultural items so common to the Shriver Site are to be found in the Adena and Hopewellian mounds and villages. Intermarriage of differing physical types and the fusion of diverse ideas produced a new way of life based on sedentary villages and agriculture. To be sure, there were probably some bands of nomadic Archaic peoples which drifted off to other areas where they were eventually absorbed or exterminated by new people with whom they came into contact.

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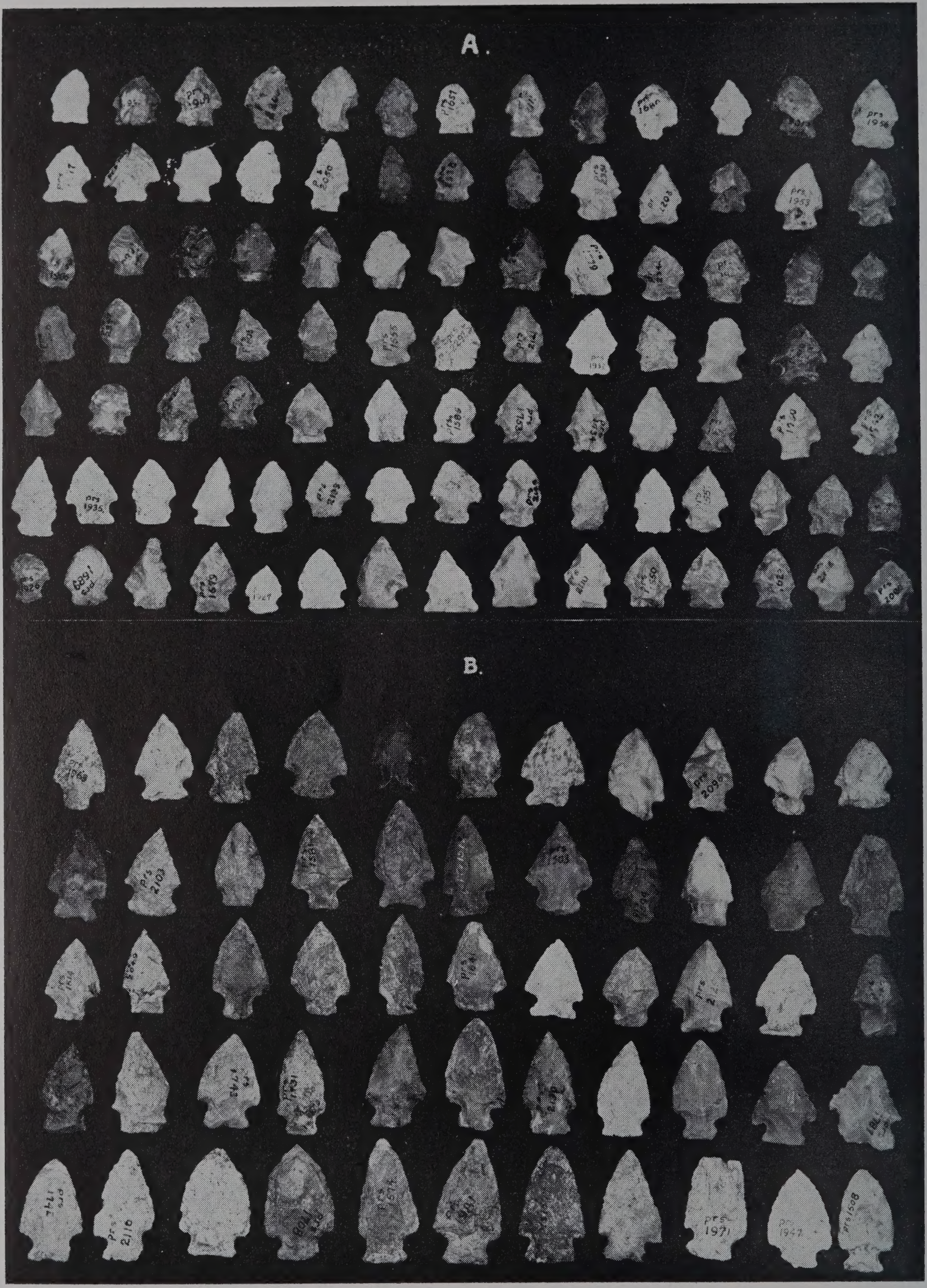


PLATE I. Typical notched and stemmed projectile points from the Shriver Site; A. small points, B. large points.

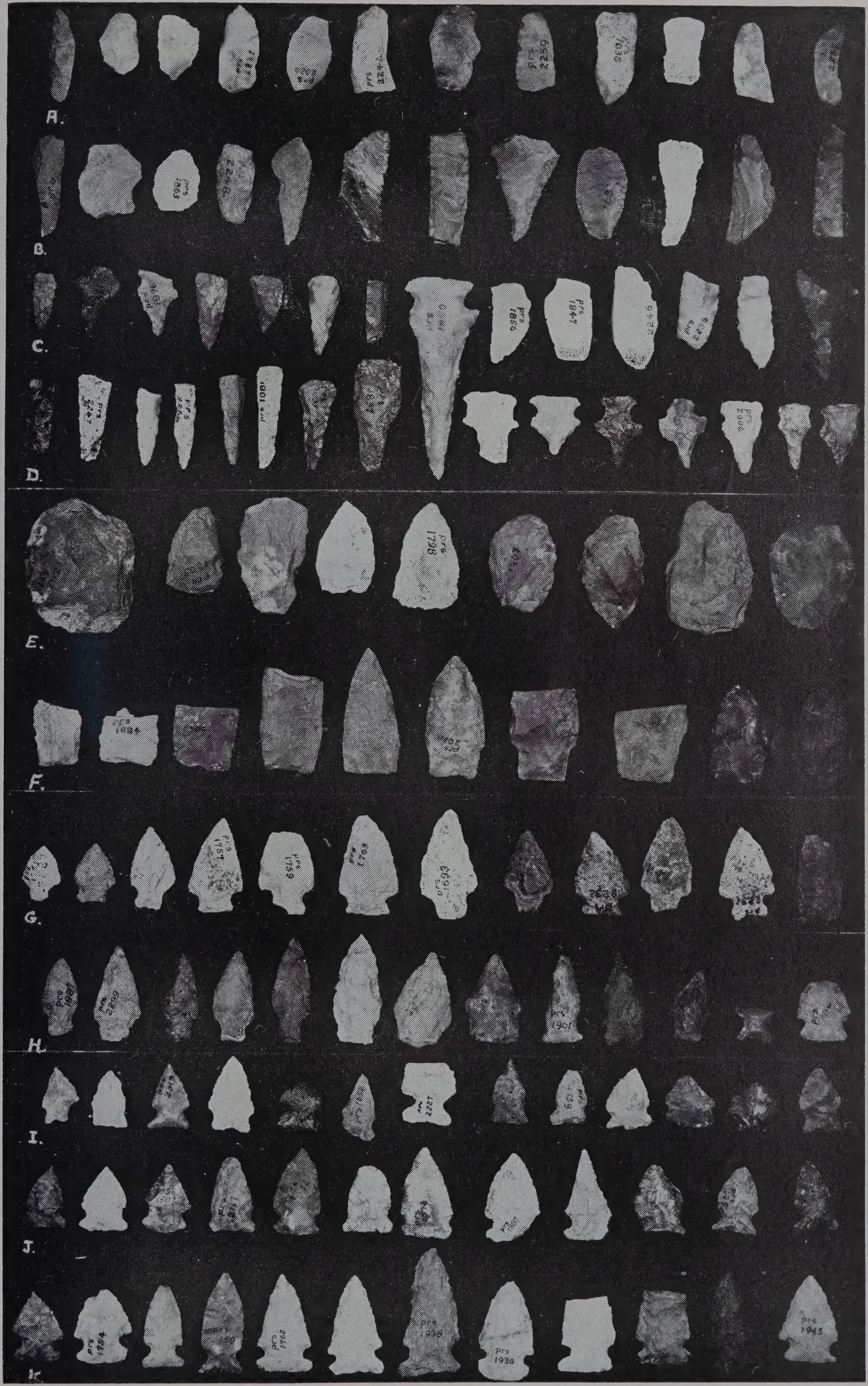


PLATE II. Minority projectile point styles, blanks, drills, and scrapers from the Shriver Site.

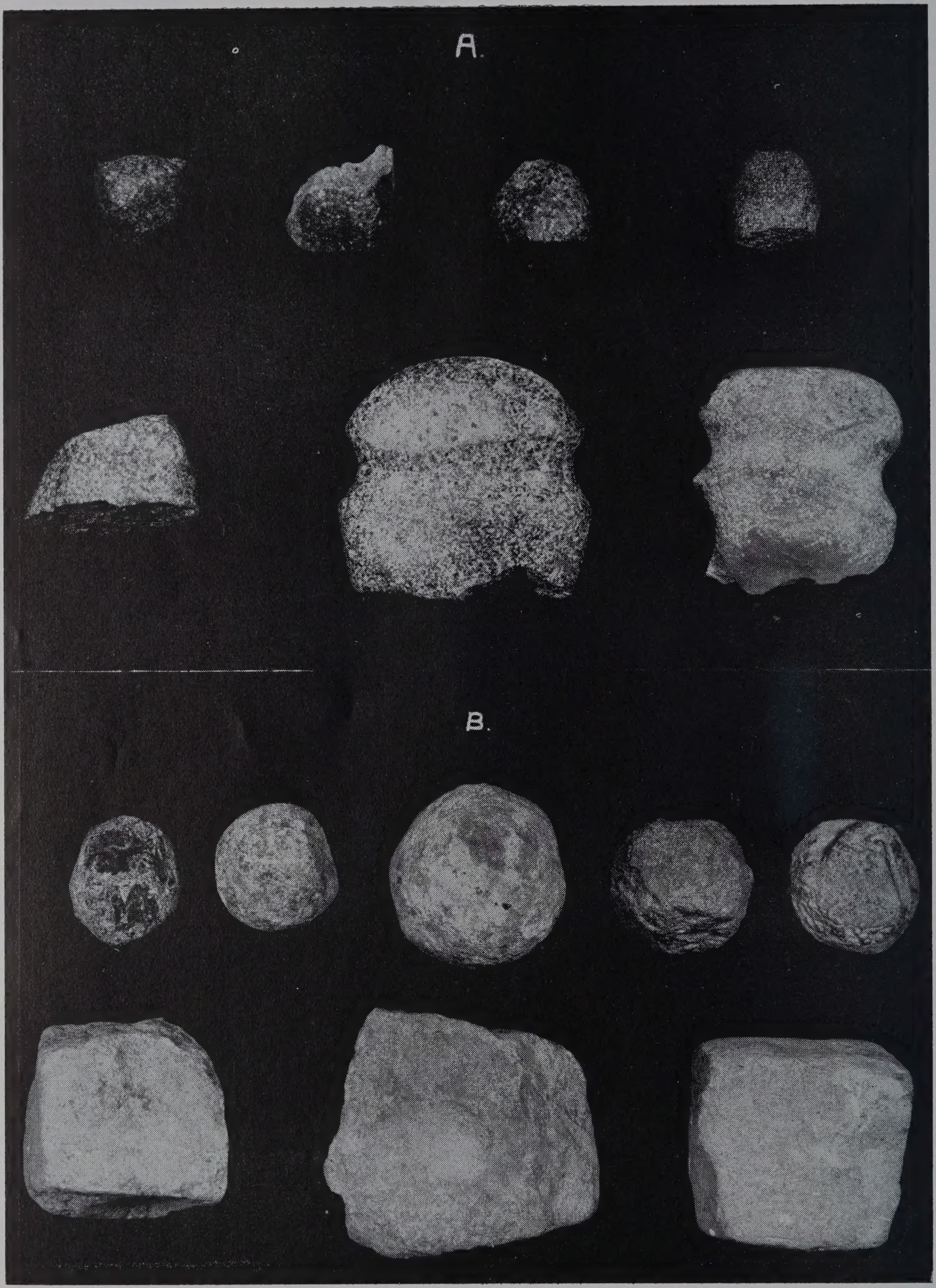


PLATE III. Stone objects from the Shriver Site; A. full-grooved axes and grooved adze fragments, B. hammerstones and pitted stones.

The Boyer's Run Rock Shelter
A Preliminary Report

By

A. C. Thompson

The Boyer's Run Rock Shelter, designated as 36 Ve 6, is situated on the 1440′ contour on the southern slope of a hill overlooking the small, densely wooded valley of Boyer's Run near the center of Victory Township in Venango County. The site is approximately two airline miles west of the Allegheny River, which is the closest artery of water transportation. The nearest sizeable prehistoric village is the West Sandy Site, 36 Ve 4, also about two miles distant.

The shelter itself is a part of a sandstone formation which appears at several points along the face of the hill at an elevation of between 1440′ and 1460′. It consists of a massive slab of solid sandstone which juts out from the hillside to a maximum distance of twelve feet, and which extends for nearly sixty feet along the hillside. A unique feature of the shelter is the presence of a great monolith of sandstone which slipped away from the face of the formation in some geological upheaval, and left behind the overhanging slab. It affords protection on the south side, extending upwards to within two feet of the roof. The sheltered area comprises a tunnel-like space averaging ten feet in width and approximately sixty feet in length, and open at the east and west ends. The interior space is well lighted and airy, but effectively protected from rain and snow.

By the time the site was first seen by the author, a Boy Scout troop had removed some sandstone slabs from the rear wall, crushed the rock, and spread it over the floor. They had not been aware of the presence of artifacts in the shelter, and consequently had not disturbed the soil. They informed me that they had not artificially levelled the floor, although the crushed stone had been tamped into the surface. The only vegetation consisted of two small trees growing at the east end. It was not found necessary to remove them in the course of the excavation.

THE EXCAVATION

The relatively regular shape of the sheltered area with its average width of ten feet lent itself readily to the adoption of a system of five foot squares in the excavation. A permanent datum point was established at the southwest corner, and the area staked out accordingly. The five foot squares were numbered consecutively from one through twenty-two.

It was soon discovered that in most areas of the shelter, although stratification existed, there was little visual evidence of it in the form of soil coloration or texture, and it was found advisable to adhere rigidly to a system of excavation in four inch levels. This may, in some cases, have cut across natural strata, but this was unavoidable.

As the soil was removed it became apparent that the bedrock beneath the floor of the shelter sloped, first gradually, then sharply, from north to south, so that while there was a deposit only a few inches deep on the north side, it reached a maximum depth of approximately four feet on the south.

A crevice in the bedrock, following the long axis of the shelter in squares three, five, and seven provided the most clear-cut evidence of stratification. In this space, averaging eleven inches in width, was a sloping deposit of very dark soil at the surface, varying between two and five inches in depth and containing a mixture of cordmarked shell and grit tempered potsherds. Beneath the black deposit was a layer of light yellow sand. On the very surface of this deposit lay a large, side-notched projectile point, and a few thick, grit-tempered Early Woodland potsherds, smooth on the exterior, and having a fabric impression on the interior. The remainder of the yellow sand was sterile. Beneath it lay another layer of dark soil about nine inches in depth, and containing bone fragments and spalls of flint, but no potsherds and no stone artifacts.

In the remainder of the shelter rock falls and the efforts of the later occupants, who dug numerous refuse pits into earlier deposits, have complicated the situation by mixing the strata. Any study of the stratification in the major part of the shelter must be approached on a statistical basis, and that is the procedure that will be followed in the succeeding sections of the paper.

THE CERAMICS

Prior to the excavation of the Boyer's Run Site very few ceramic specimens were known from Venango County and those were, for the most part, recovered from the surface by artifact hunters. Thus we have an exceedingly flimsy groundwork for a study of local ceramics, and until more work is completed it may be best to avoid positive statements on problems of ceramic sequences, and their relation to those of other areas.

Nine distinct pottery types were found in the excavation of the rock shelter. These fall into two main categories, those containing crushed mussel shell as tempering and those exhibiting a tempering composed of various types and sizes of grit. Their descriptions follow:

1. Shell tempered ware with cordmarked exterior and smooth interior. Rims of this type are usually slightly everted, and fairly strong neck contraction is common. Bases of the vessels are rounded in every case. In some instances the upper surface of the rim has been decorated with diagonal impressions left by the edge of the cordwrapped paddle.
2. Shell tempered ware with smooth exterior and interior. This somewhat less popular variety is characterized by straight rims and little contraction at the neck. The bases are invariably round. Occasional incised decoration occurs near the rim.
3. Grit tempered ware with cordmarked exterior and smooth interior and averaging 0.25 in. or less in thickness. Tempering consists of fairly large fragments of crushed quartz in most cases. Rims are usually straight, but may exhibit slight neck contraction. Bosses appear occasionally along the rim, but do not interrupt the contour of the upper surface. Bases are round in all cases.
4. Grit tempered sherds, smooth on both the exterior and interior, and also averaging 0.25 in. or less in thickness. Rims are more strongly everted than in the case of the cordmarked grit tempered ware. Tempering matter is similar to above. Bases are rounded.

In addition to these four principal varieties, which constitute by far the greatest number of sherds, five other types occur in smaller quantities as follows:

5. Grit tempered, net impressed sherds with a plain undecorated rim and straight neck. Base presumed to be round.

6. Sand tempered sherds, smooth on both exterior and interior. The two rimsherds recovered suggest a shallow, dish-like vessel.
7. Mixed crushed shell and grit tempering. Smooth on both exterior and interior. Plain rim and slight neck contraction.
8. Cordmarked, crushed granite tempered sherds with a textile impression on the interior. Average thickness 0.60 in.
9. Granite tempered sherds with smooth exterior and fabric impressed interior. Average thickness 0.50 to 0.60 in.

The two five foot squares most useful for a study of the ceramic sequence on the site were squares six and eight on the south side. These attained a depth of twenty-eight and thirty-six inches, respectively, disregarding a narrow crevice on the south side which extended downwards another two feet. These squares were somewhat freer of rock falls than the others, and the evidence that they produced was more consistent.

The percentage of cordmarked shell tempered sherds reaches a peak in the second (4″ to 8″) level in each square, accounting for 45% of the total number in one case and 52% in the other. From this peak it dwindles to 8% in the fifth level of square six, and disappears entirely in the sixth.

The smooth shell tempered sherds attain maximum frequency in the first lap, where they represent 32% of the total sample of 249 sherds, disappearing in the sixth level of square six.

Cordmarked grit tempered sherds in each case reach a peak at the lowest level, and represent 100% of the total count by the seventh lap of square six, and the ninth lap of square eight.

Smooth grit tempered sherds represent a small portion of the total count, and their position is not well established. They appear in square six to reach a peak in the third lap.

The other ceramic varieties described do not occur in sufficient numbers in squares six and eight to have any statistical significance, but judging by their appearance in the other squares, in which they are more numerous, the sand tempered sherds, and those tempered with a mixture of shell and grit belong to the later period.

The thick, granite tempered sherds, smooth or cordmarked on the exterior and fabric impressed on the interior, are almost entirely lacking in squares six and eight. They are more numerous in the shallow squares along the rear wall of the shelter, where they were found in crevices and lying on the bedrock. Although their scarcity has made a statistical study impractical, their strong resemblance to Early Woodland ceramics of Ohio and West Virginia indicates that they represent the earliest ceramic phase on the site.

Thus the evidence at hand would indicate the use at the shelter in the Early Woodland period of vessels with either smooth or cordmarked exteriors and fabric impressed interiors. Thinner, cordmarked, grit tempered vessels succeeded this variety, and a little later the smooth surfaced grit tempered wares appear, though they do not seem to have attained the popularity of the cordmarked types. The innovation of shell tempering appears at this point both in the form of smooth and cordmarked wares, though in the latest phase the smooth, almost polished wares attain the greater popularity.

THE ARTIFACTS OF STONE AND BONE

One hundred forty-two stone artifacts were recovered in the excavation of the shelter. Of these forty-two are classifiable projectile points. By far the most numerous are the triangular arrow points of small size, which represent 64% of the total. As would be expected, these occurred primarily in the upper strata, constituting 89% of the total in the first lap, 70% in the second, and falling off to 28% in the third. Three principal varieties of triangles were found, all but one of which were isosceles. They are straight based, concave based, and convex based. The one example of an equilateral triangle had a straight base. The sample is really far too small for any definite conclusions, but it would seem that the straight based triangles appear earlier on the site, with the convex and concave based types coming in later. Side-notched, corner-notched, and stemmed varieties occur with much greater frequency in the lower levels.

Perhaps the earliest object discovered in the excavation is a basal fragment of a lanceolate projectile point of striated blue-grey chert, closely resembling those known from early Archaic shell midden cultures. It, as in the case of a number of the earlier objects, came from one of the very shallow deposits lying over the bedrock near the rear wall of the shelter. The non-local character of the material is an exceptional case. The great majority of the artifacts found were made of materials readily obtainable in the form of pebbles in the Allegheny river bed. Black and grey chert. flints with varying coloration, and red and yellow jasper-like materials are common.

In addition to the projectile points, a number of end scrapers, thumbnail scrapers, side scrapers and knives were found, some showing evidence of much use. Drills were less common, and only five were unearthed in the excavation. Artifact blanks and unfinished artifacts were uncommon, and this fact together with relative scarcity of spalls, has given rise to the suspicion that the site was not occupied during the entire year. Sites along the Allegheny River in Venango County produce such quantities of spalls and blanks that the contrast is quite striking.

Among the larger stone artifacts were two celts, one in a fragmentary condition, a chopper and several hammerstones.

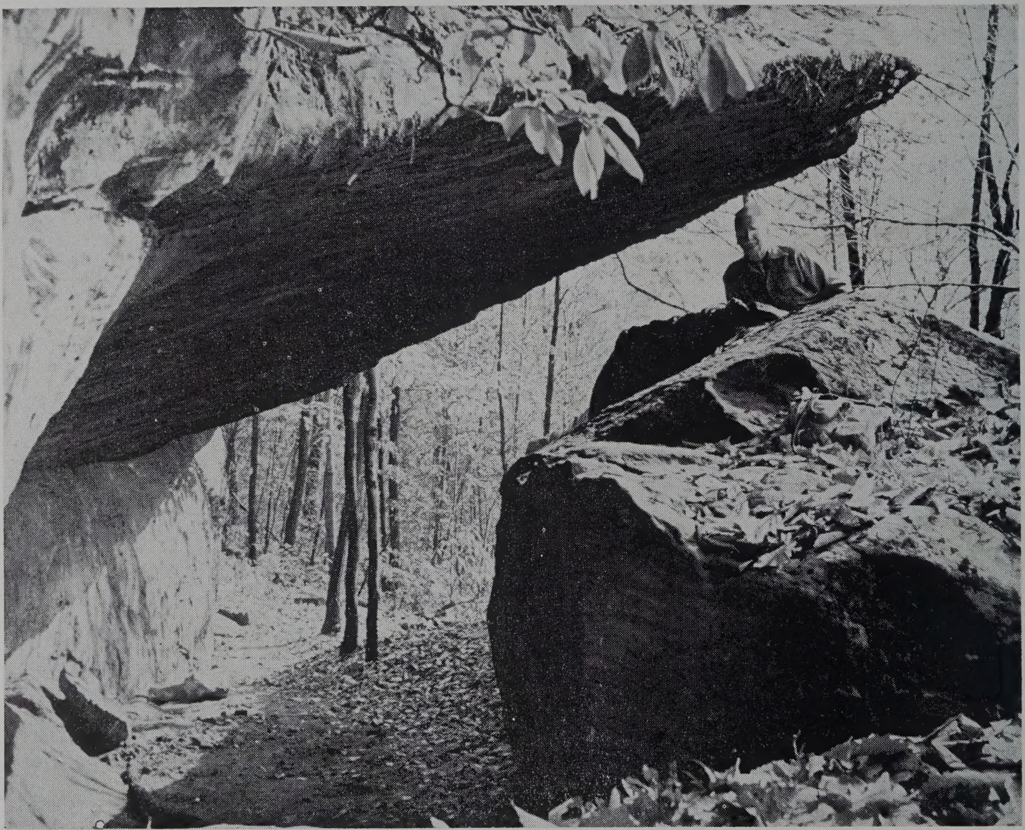
The bone artifacts consist mainly of small awls and punches, several showing carefully smoothed and polished surfaces. The only ornamental object found was a small gorget fragment of banded slate.

CONCLUSION

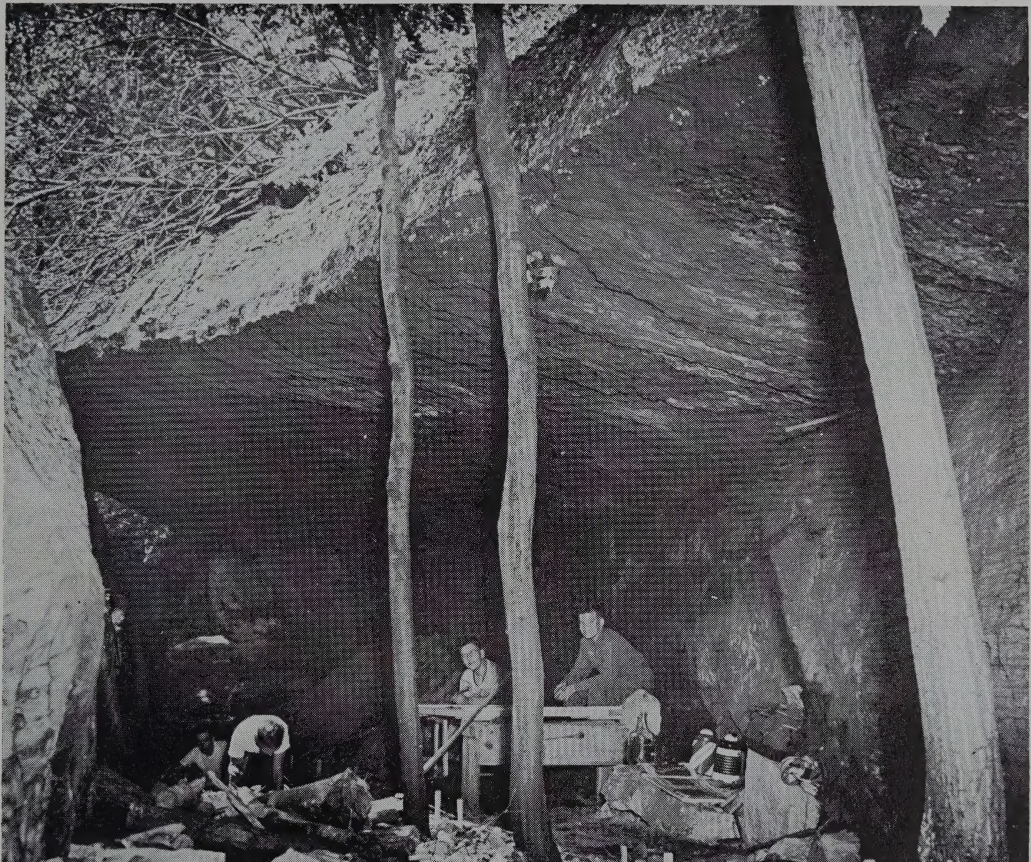
The evidence uncovered in the excavation indicates that the shelter was occupied periodically from the Archaic age to Late Prehistoric times by small groups who depended exclusively on hunting and fishing for survival. Among the large quantities of carbonized material occurring in certain areas of the shelter no trace of cultivated food materials was found. The only charred organic matter other than wood consisted of the shells of hazel and hickory nuts. Skeletal remains of most of the common mammals were found in great quantities, as were the bones of fish and the shells of river mussels. Even today the valley of Boyer's Run and the surrounding wild countryside is a favorite hunting ground and is well supplied with deer, squirrel, grouse and wild turkey, and the shelter itself is frequently used by modern-day hunters.

During the excavation and the evaluation of the results of the work, certain problems have arisen concerning the sequence of the less common ceramic varieties, and in particular the major question of whether or not the inhabitants of rock shelters in this area had a cultural pattern distinct from that of contemporary groups occupying open sites along the streams and rivers. It is hoped that work now under way at the Heister's School Rock Shelter, Ve 10, and at several river bank sites, will aid in solving these problems.

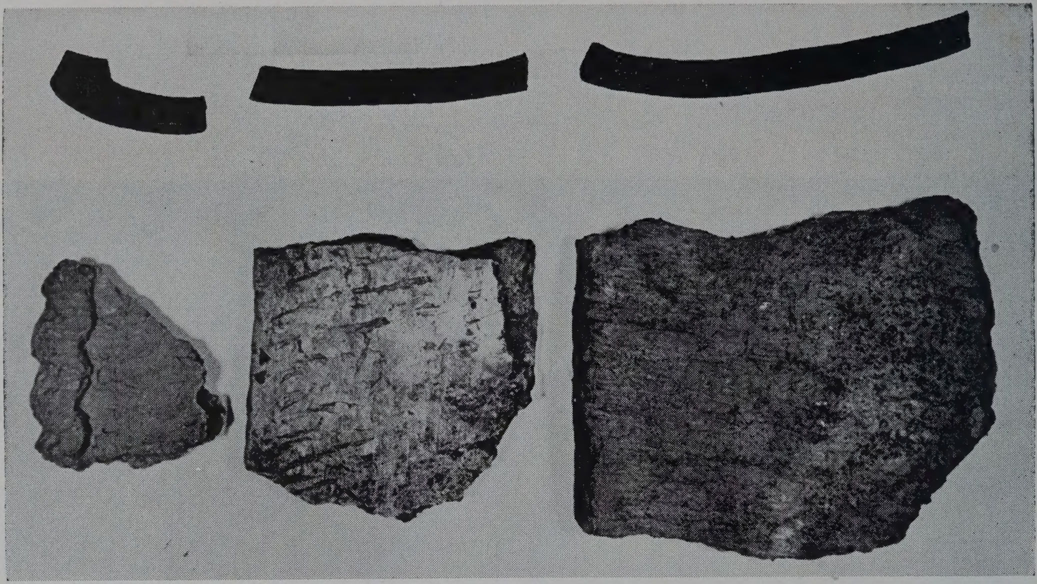
In conclusion I wish to express my appreciation of the kind cooperation of Mr. A. C. Boyer, owner of the rock shelter, and of the invaluable assistance of many friends who aided in the routine chores of excavation. I also wish to express my thanks to Mr. W. J. Mayer-Oakes and Mr. Donald Dragoo of the Carnegie Museum staff for many helpful suggestions.



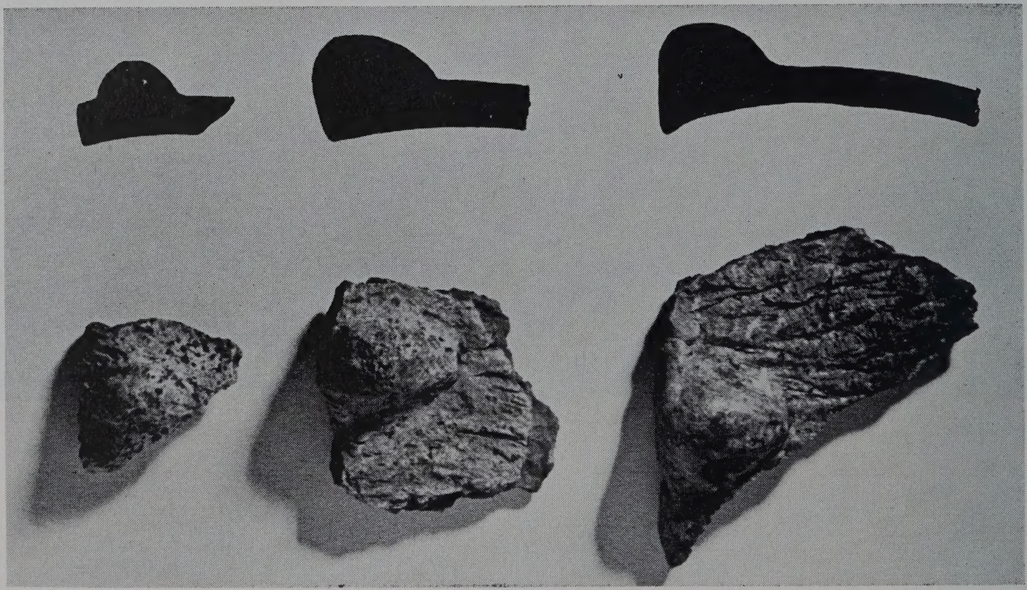
1. The site seen from the west.



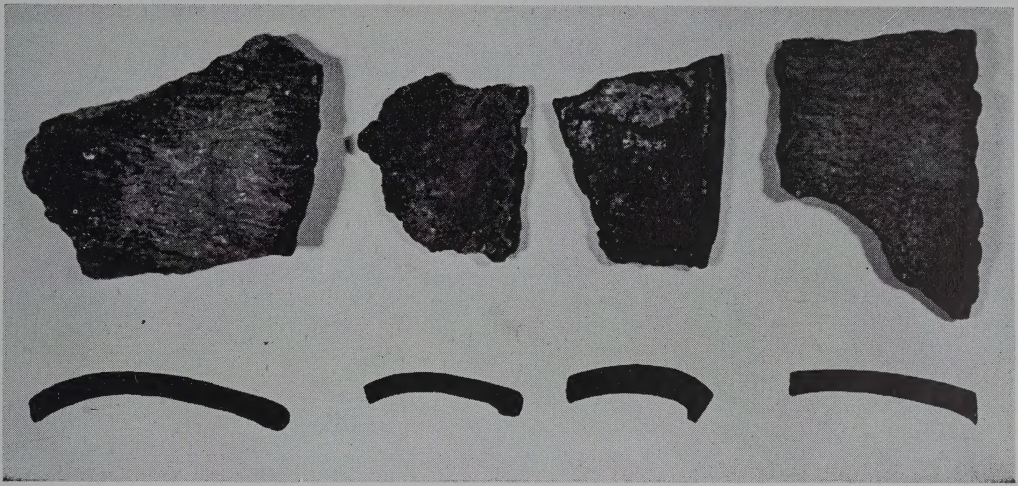
2. The site from the east with excavation in progress.



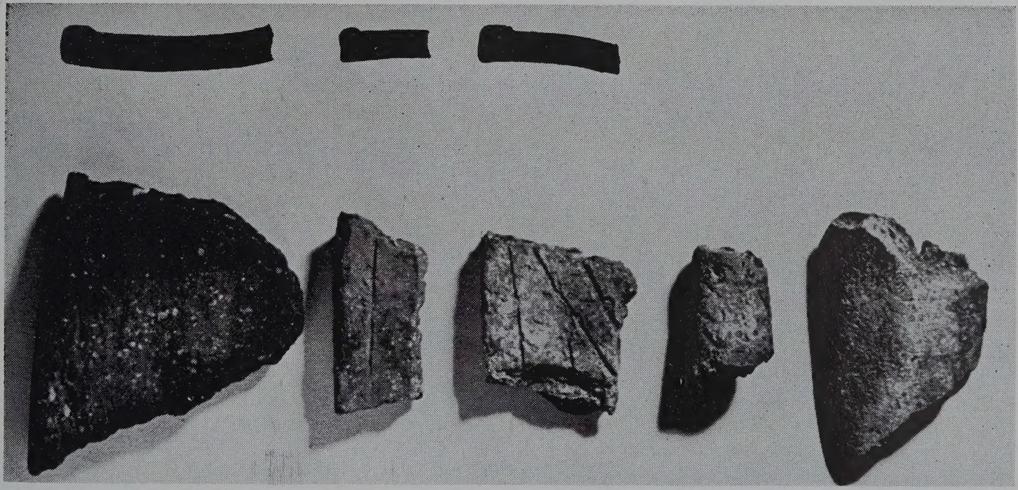
3. Cordmarked grit tempered rimsherds.



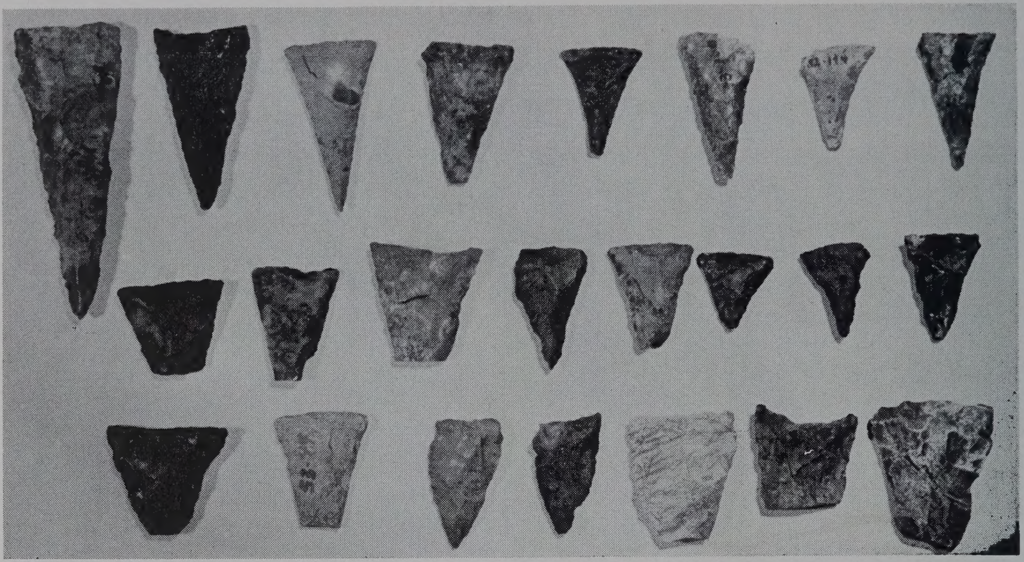
4. Cordmarked grit tempered rimsherds with bosses.



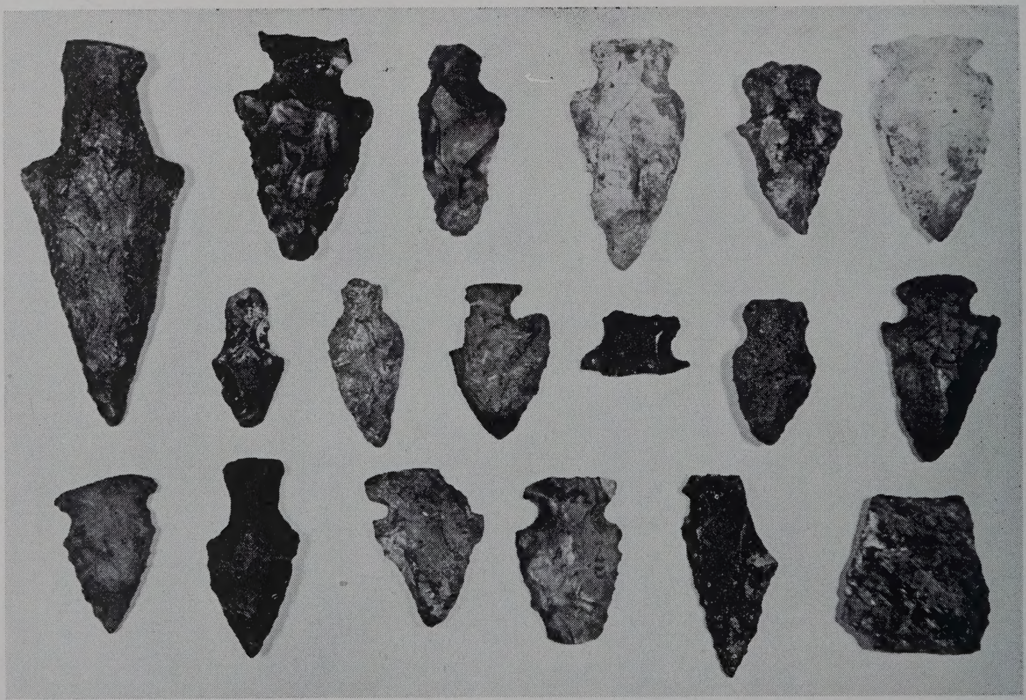
5. Cordmarked shell tempered rimsherds.



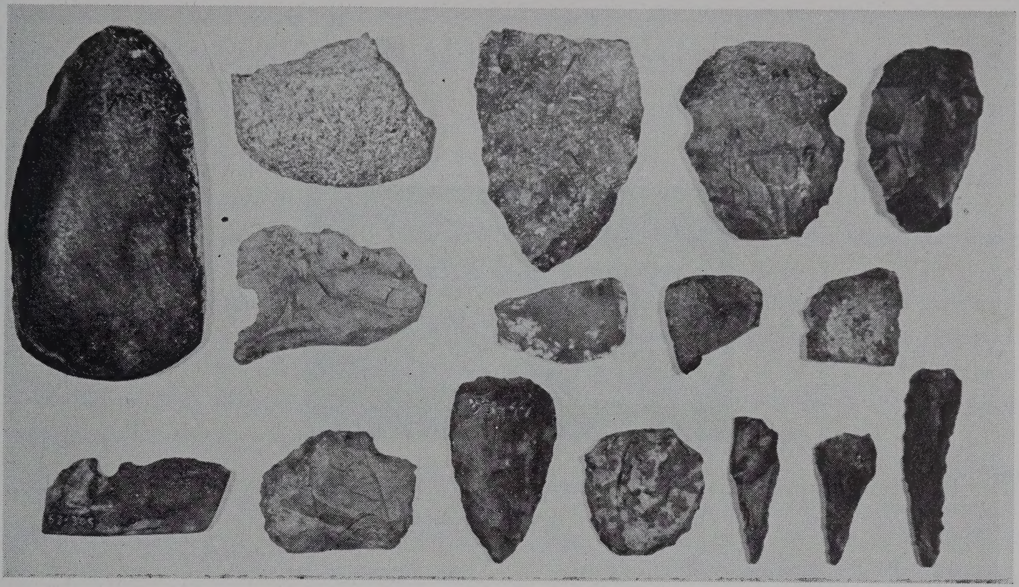
6. Smooth shell tempered rimsherds, two of which show incision. Below—two smooth shell tempered pipe fragments.



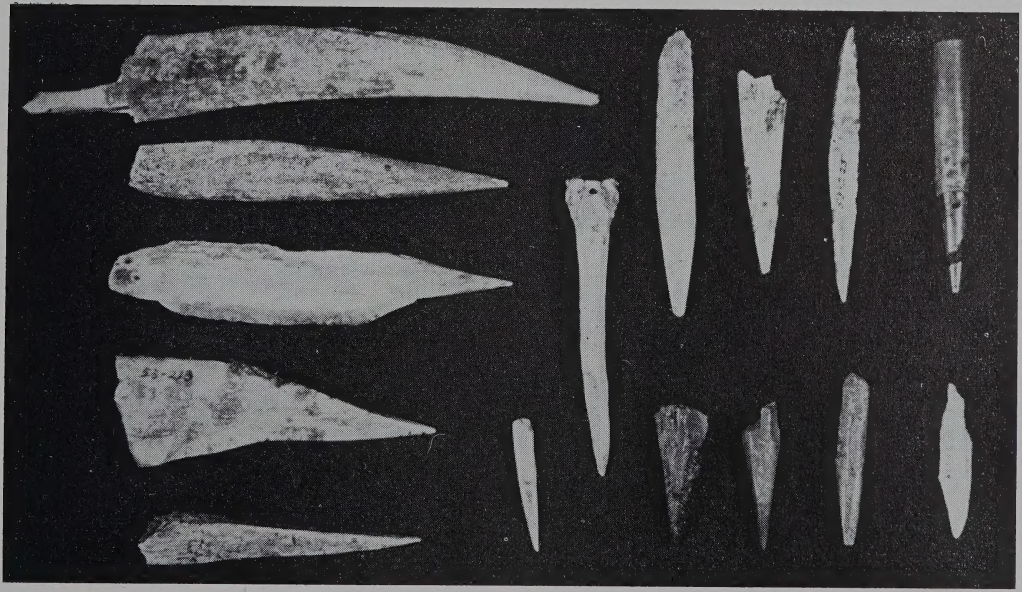
7. Triangular projectile points.



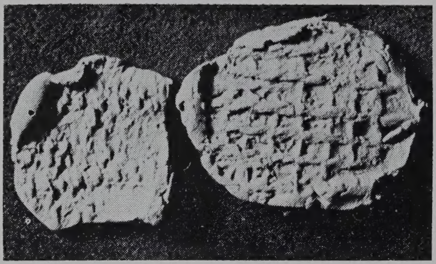
8. Side-notched, corner-notched, and stemmed projectile points. Note at the bottom right a basal fragment of a lanceolate point.



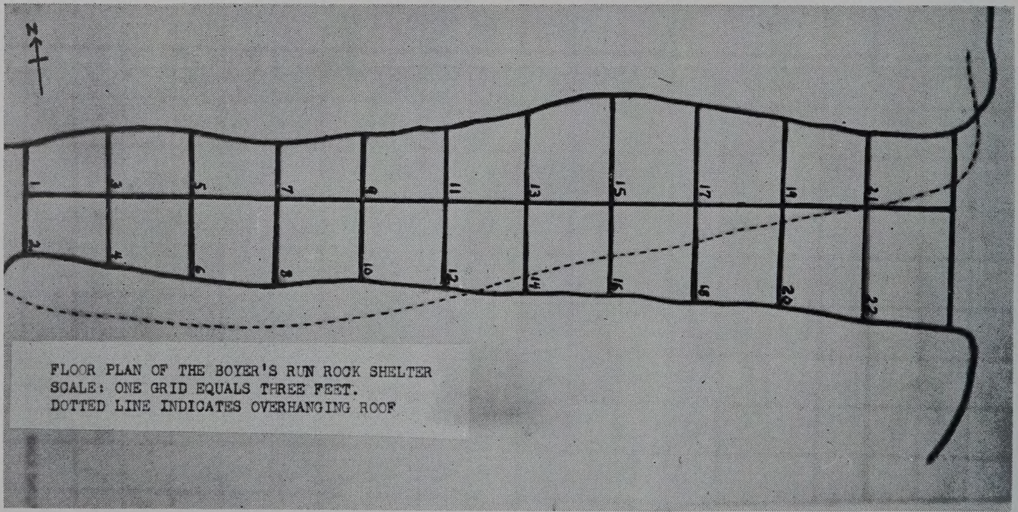
9. Celts, scrapers, knives, and drills. Note gorget fragment at lower left.



10. Bone punches and awls.



11. Plasticene impressions of: l. interior of an Early Woodland sherd with textile marking, r. net impressed sherd.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FLOOR PLAN OF THE BOYER'S RUN ROCK SHELTER
SCALE: ONE GRID EQUALS THREE FEET.
DOTTED LINE INDICATES OVERHANGING ROOF

12. Plan of the site.

Archaeolgical Sites of Venango County

By

CAROLEE K. MICHENER

WORK in the little known archaeological areas of Venango County has moved forward rapidly during the past few years and for the first time serious efforts are being made to catalogue and organize the findings into a definite pattern, forming a more comprehensive picture of the early occupations in this region.

Spurred by the work of the Upper Ohio Valley Archaeological Survey, conducted by Carnegie Museum, Pittsburgh, residents of the county have taken an interest in the program, proving that many, when given the proper incentive, have a desire to learn more of the facts relating to the prehistoric occupations in this country.

The research and efforts of A. C. Thompson, of Franklin, Pa., have been of particular benefit and a number of amateurs in this field, including those who have discovered antiquities on their farms and near their homes, have been helpful in supplying information as to the location of Indian sites and in providing artifacts for study.

Evidence of widespread occupation throughout the county has been discovered and dozens of sites identified, some as permanent homes and others as merely hunting shelters or camping sites. In contrast to the reports from surveys in the eastern part of the state, particularly those relating to the extensive Susquehanna River project, most of the materials found here can be clearly judged as prehistoric rather than from the later historic periods.

Artifacts identified with the Archaic through the Late Woodland periods have been discovered in Venango County, in rock shelters and at other sites near waterways. A variety of pottery types, covering all phases of the Woodland period recognized in this section, has been found since Mr. Thompson began his studies, and the stone and flint objects are representative of almost every known age.

Although numerous archaeological surveys have been made in Eastern and Southern Pennsylvania, as well as New York state and Ohio, most of the northwestern area of Pennsylvania had until a short time ago remained untouched by planned excavations.

The first major project of this type within Venango County was completed in the summer of 1953 under the direction of Mr. Thompson at the Boyer's Run Rock Shelter Site (Ve 6) in Victory Township in the southern part of the county. Several other rock shelters—none as pretentious or as ideally suited for occupation as that at Boyer's Run—have been investigated since and a number of other sites of Indian occupation in the county have been discovered and charted.

Although officially settlement here begins with findings from the Archaic period, it is possible, too, that there was occupation by the Paleo Indian people in Venango County near the close of the last ice age, about 10,000 years B.C.

It is probable that the nomadic Folsom-like people, who lived exclusively by hunting, at one time roamed into this section. Evidence helping to support this theory has been discovered near New Vernon, in Mercer County, not far from the Venango

County line. A flint projectile point, believed to be the type used by the Paleo Indian people, was found a number of years ago on the Haylett farm along with other antiquities which have been in the family's possession since their discovery.

The long, slender flint point closely resembles the Folsom tips found in several areas throughout the United States, Alaska and Western Canada, and is the only one of that type known to have been discovered in the immediate Venango County area.

These Folsom-like people traveled extensively throughout the western states, presumably following a migration from Asia to Alaska, and at the close of the ice age they moved eastward in small family groups, constantly on the trail of the large, now extinct, animals which provided their livelihood.

Many fine specimens from the Archaic period, the next distinctive culture to occupy the North American continent, have been found throughout Venango County, proof of widespread settlement in this region from 5,000 to 7,000 years ago.

A step more advanced than their predecessors, the Archaic people hunted chiefly small game, and they added acorns, berries and other natural fruits of the land to their menu. They did not roam aimlessly in pursuit of food, but utilized the rivers and streams as their highways of travel. They ate quantities of shell fish, and surveys in the Ohio River Valley have unearthed huge shell middens, heaps of discarded mussel shells which accumulated over the years.

Here crude flint artifacts link Venango County with the Archaic period and several sites in the area bear evidence of this early occupation.

The spear was probably the chief weapon of man during the Archaic age and the discovery of these large points is characteristic of that occupation. Often the darts were thrust with a wooden throwing stick, or atlatl, frequently equipped with an atlatl weight to give it strength and momentum. An excellent example of an atlatl weight has been found on the Shay farm in Jackson Township at the northern part of Venango County. This same area has produced many projectile points, large scrapers, crude knives, beveled stone celts and other materials from the Archaic and later periods.

The atlatl weight of smooth, polished stone has a hole neatly bored in the center, and the natural markings and grain of the stone are displayed handsomely. This simple weight, a contrast to the crude spear points, is a product of the skill and talents of these primitive people and indicates the painstaking work necessary for survival. However, the perilous existence of the times, coupled with a poor diet, made 27 to 30 years the average life span of the Archaic people.

The late Archaic period is well-represented in the variety of materials found on the John Wood farm, located midway between the village of Utica and Highway Route 322 northwest of Franklin. Most of the specimens were discovered by Mr. Wood while farming and they come from the vicinity of Worden Run, a small stream which crosses the property. The large spear points are crudely worked, but each is perfectly shaped, assuring balance and strength.

Stratified sites, both in the rock shelters and in open areas, provide a record of slow but continual progress through the centuries. The prehistoric periods between the time of the Archaic people to the reports of the "modern Indians," recorded with the arrival of the white man, have been classified loosely as Early, Middle and Late Woodland. These occupations are further distinguished in different locales by various other names, such as the Hopewell culture or "Mound Builders" of Ohio and the Monongahela Woodland occupation of Southwestern Pennsylvania.

The Woodland period marks the development of agriculture, the first evidence of planned communities and the increased appearance of definite rituals and customs in the lives of North American inhabitants. Pottery also had its beginnings early in this period advancing from coarse, heavy textured vessels to the thinner, stronger materials found in late prehistoric occupations.

The bulk of material found in Venango County is related to the Woodland period and sites which are stratified indicate that there was an apparent overlapping of the different cultures. Certain characteristics which are carried through from one period to another support the theory that at least during the Woodland period one race was not extinct before the advance of a new occupation.

Prior to the work at the Boyer's Run Rock Shelter last summer, Mr. Thompson conducted test excavations at a site at the mouth of West Sandy Creek (Ve 4), along the Allegheny River south of Franklin. All the materials from there, including a large number of artifacts and pot sherds, are classed in the Middle and Late Woodland periods.

A number of rock shelters are to be found in this area and will no doubt provide Venango County's most interesting contribution to the archaeological scene. These natural formations are ideal shelters and homes for primitive occupants. Some, particularly the excavated Boyer's Run Shelter (Ve 6), are roomy enough to provide comfortable quarters for a large family, and their nearness to fresh water supplies and other conveniences indicates they were used as homes for an extended period.

Others, however, are small and cramped and do not afford proper protection against rain, snow and the other forces of nature. Some have yielded only a small amount of material and it is probable that they were used as a hunting camp or as a stopping point for travelers.

One shelter (Ve 8), which can be described as a cave underground, was discovered by a modern-day hunter and is concealed in a heavily wooded region. It is located on a hill between Doerr Run and Silver Run in the Congress Hill area just south of Franklin. Even with the numerous dirt roads in the district today, it is in a remote spot and the few items found there indicate they were articles discarded by early hunters.

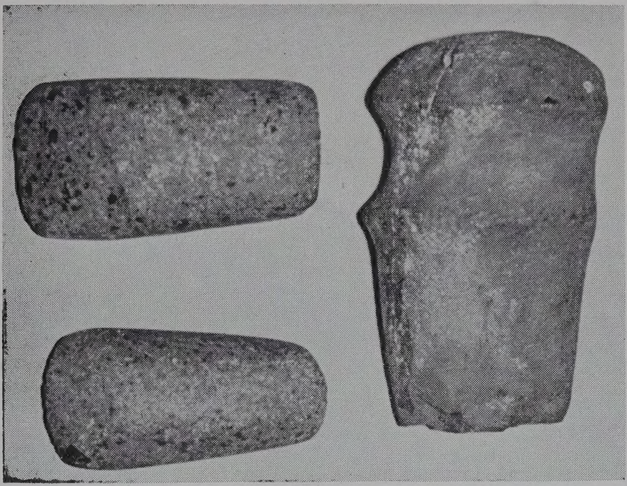
Two rock shelters are located in the Pithole vicinity in the northeastern section of the county. One is known as Pittsburgh Rocks (Ve 12) and the other as Huidekoper Rock Shelter (Ve 13). James Stevenson, of Titusville, has been instrumental in the recent investigations of these points and they were also visited by Mr. Thompson. Both show abundant signs of occupation during the late prehistoric period and many bone tools were among the well-preserved articles found at Pittsburgh Rocks.

The Huidekoper shelter is one of the most unusual rock shelters in this region and was certainly not designed for human comfort. It faces the slope of the hill, the "floor" slanting ready to receive a volume of rain and snow as it washes toward the valley. It is undoubtedly continually wet and damp, but a considerable quantity of pottery and artifacts has been found there. It is reported that the Huidekoper site was excavated in the late 1890's by John Franklin Carll, the first state geologist, but no one in this area today has been successful in learning the fate of the articles taken used as homes for an extended period. from the shelter.

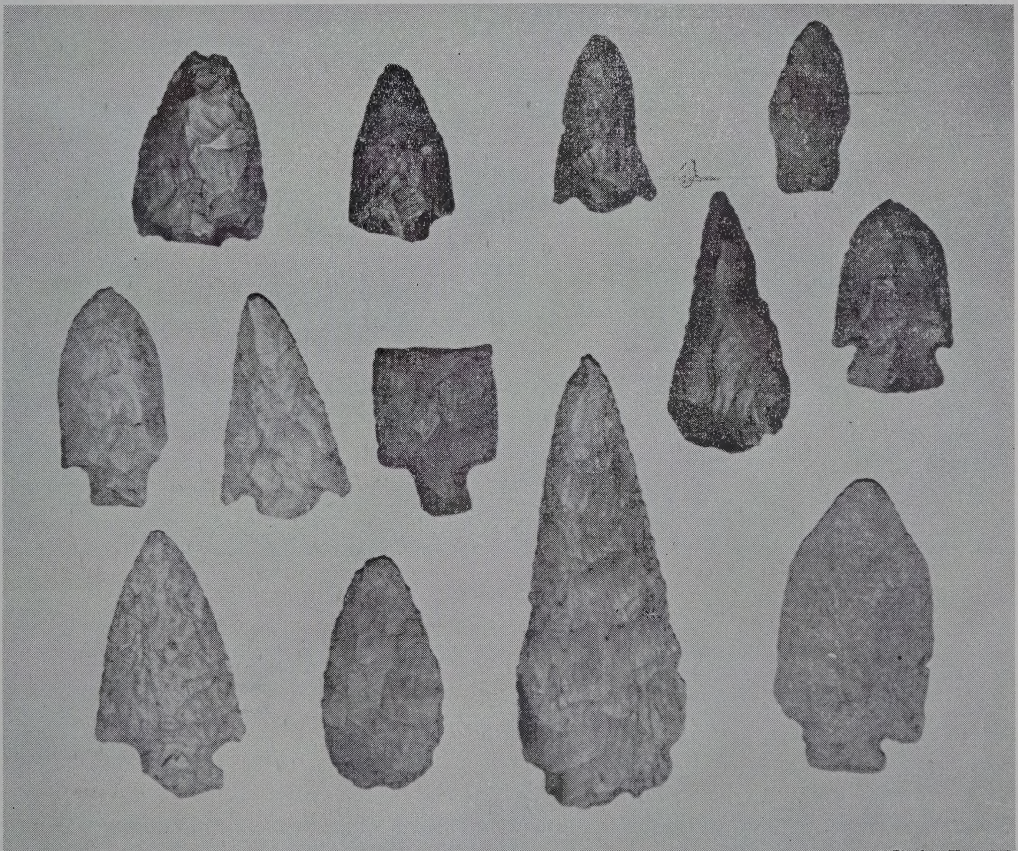
In the immediate Franklin area, the Shields' site at The Point has been identified and a large number of flint and chert projectile points has been discovered there on the lowlands near the confluence of French Creek and the Allegheny River.

Other sites along the river have been recorded at Dotter, south of Franklin, and farther north, above Oil City, at Oleopolis, Henry's Bend and Eagle Rock. Brandon's Ferry, along the river below Franklin, has been reported as an historic site and signs of prior occupations have also been discovered there (Ve 7). Considerable evidence of prehistoric settlements has been unearthed across the river from Brandon on the present Earp and Kelly lease.

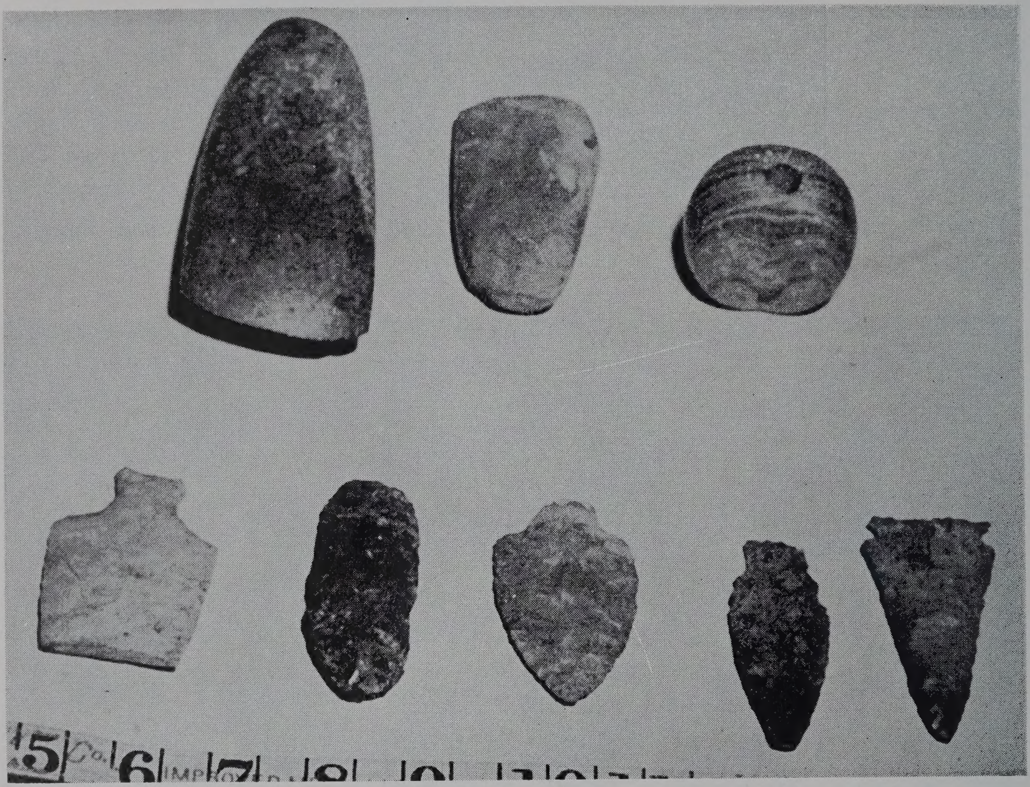
One of the best known Indian sites in this area is the McFate site in Cochranton, Crawford County, just northwest of the Venango County line. The area was excavated in 1939 but still yields an abundance of material, pottery, artifacts and bone implements, for those interested in surface hunting.



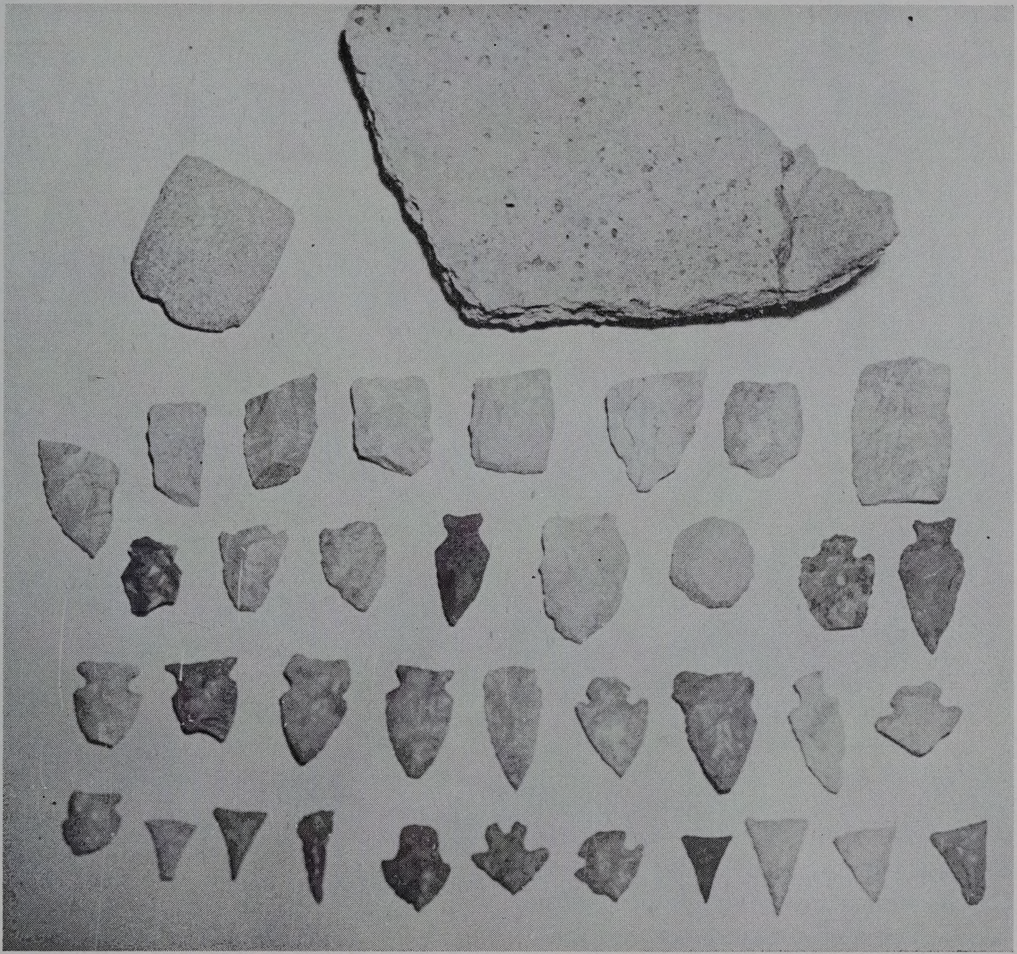
Beveled stone celts and a large axe found near Worden Run on the Woods farm, Venango County.



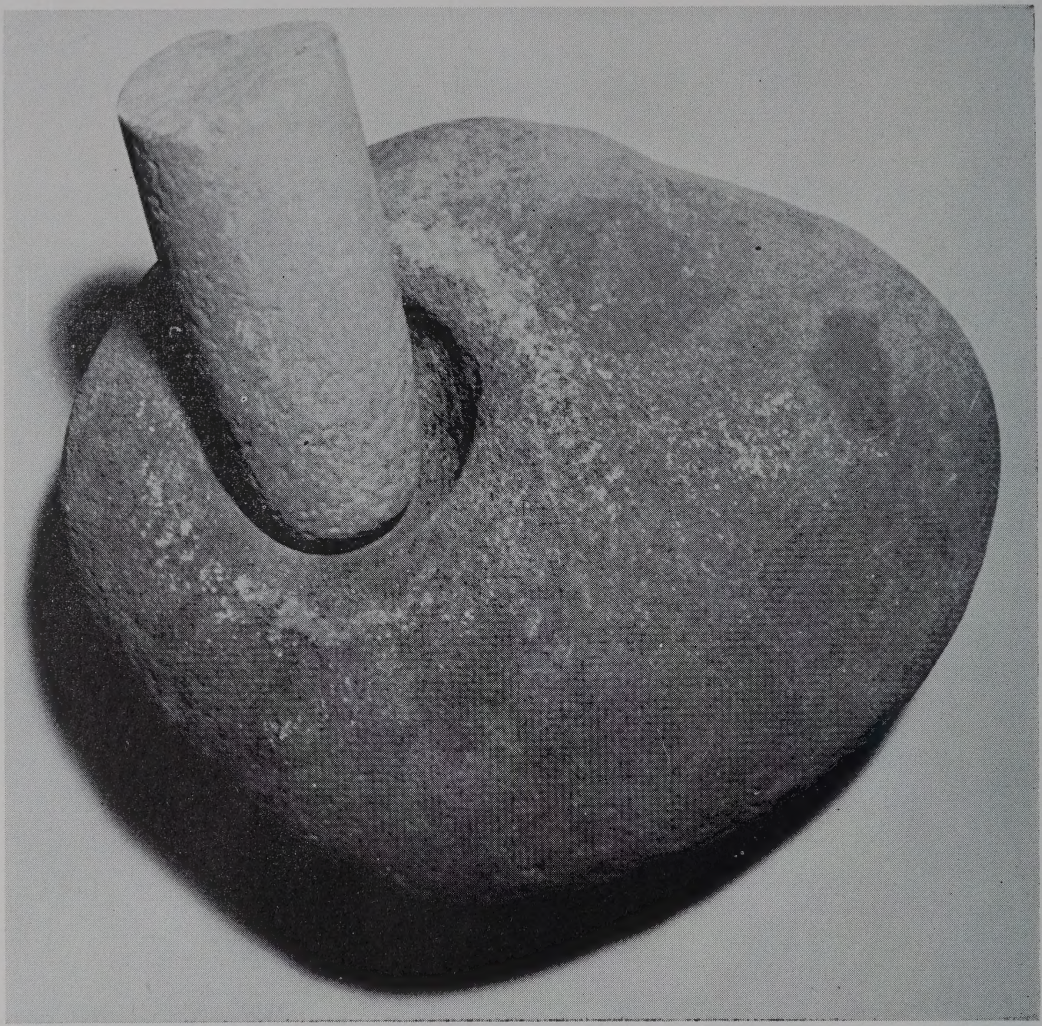
Archaic projectile points found on the John Wood farm, northwest of Franklin, Pa., Venango County.



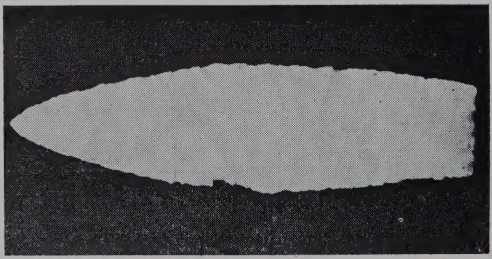
Excellent specimens of the Archaic period found on the Shay farm in Jackson Township, Venango County. A handsome atlatl weight is in the upper right corner. The celt at the upper left is tapered into a particularly fine, sharp cutting edge.



Shell tempered pottery and small projectile points representative of the Late Woodland culture were found in test excavations at the mouth of West Sandy Creek (Ve 4) along the Allegheny River, Venango County. Most materials from this site are from the Middle or Late Woodland periods.



Mortar and Pestle from West Sandy excavations (Ve 4).



Possible Folsom-type point found near New Vernon, Mercer County.

Looking For Artifacts - - Part 5

By

VINCENT R. MROZOSKI

C. Selection of Site

Before you begin your excavation you must be able to assure yourself that you are qualified and technically equipped to undertake this task. Such qualification includes not only a knowledge of archeological objectives and archeological field methods, but also a thorough knowledge of all previous work in the area with which you are concerned. You should prepare yourself for your field work by a critical reading of all the important literature concerning your special area. From this survey you will gain a knowledge of what has already been discovered. In addition, you will probably visualize problems not seen by your predecessors. I am sure you will not attempt such a large task by yourself but with the help of your group. You must know what you are doing and be able to direct the men who are working with you. You must also be able to ensure smooth public relations with local residents and be able to provide permanent and adequate care for the resultant collection. Finally, after careful excavation of the site and the keeping of accurate maps and notes, the results should be published. The excavator who cannot assure himself that all these conditions will be met, no matter what his intentions may be—is committing an act of vandalism against a natural resource of ultimate public interest. Professional and amateur archeologists are aligned together in condemning any excavating activity that does not eventually produce a full publication of the results of a careful and correct excavation.

Usually, the selection of a site for excavation may depend on the following reasons:

1. *Conservation of Information*

When an archeological site is threatened with destruction by erosion, the building of factories, homes and roads, and by the building of dams[1] by the government and private concerns. Where conservation is the main interest, the site to be selected will be the one that is threatened with earliest destruction. When several or more sites will be destroyed, such as in dam building—the site which promises the most information should be selected. The less a site has been disturbed by recent occupation, cultivation, and previous excavation, the more information it will yield, especially in cultural stratification, and the chances of a sequential occupation are greater if the site is greater and deeper.

2. *Solution of a Defined Problem*

The archeological surface in our area and adjacent states has hardly been scratched. Upon deciding to excavate a site, try to select it on the basis of interest, using any previous surveys of the region to help in your decision. Test-pit sites to determine the depth of the deposit and the nature of cultural material. You may wish to compare the pottery from your site with that from a known site where archeological work has been done by others in some locality miles away. Perhaps the quality and material are the same and it may have been made and transported by the same people. Keep in mind any indications of the life of the people who lived on your site by making notebook observations of such points as the food supply, the utensils employed, and the vegetal and animal remains. Animal and fish bones, turtle, clam, and oyster shells, seeds, charred corn, fire-cracked cooking stones, mortars and pestles, will all contribute to the definition of a people's economic pattern.

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[1] Since nothing is being done by the government in the Upper Delaware and Shenango Regions—here is a challenge for you, the amateur, to gather as much information as possible in the little time that is left before these areas are flooded and destroyed. Archeologically these areas are poorly known and the situation remains critical. Those in the two mentioned areas can do a lot for the science of archeology by working these regions. Any information gathered here would be appreciated by our State Anthropologist. Thank you.

An abundance of bird and animal bones may indicate their use as flaking tools, various types of bone awls, needles, combs, bone beads, gravers to scrape or engrave pottery vessels, whistles or calls, harpoons, fish-hooks, charms, and ornaments, not to mention dozens of other uses. Perforated animal teeth, used as necklaces, were common, with antlers being used as flaking tools; some of these latter were made into smoking pipes and arrow-points. Examine all bone excavated on your sites for any such indications of use.

3. *Training of Students*

The majority of all archeological excavations are carried on by the museums, colleges and universities which are engaged in the professional training of students who will themselves direct such work. If the training of students, or the amateur, is the main objective of the archeologist, he may select a site resembling one that has already been excavated in order that he may be prepared for the type of material which it may yield. This will enable the director to devote most of his time to training activities. It may also permit him to guess in advance as to the type of archeological experience offered the student. He can seldom count on removing more than 125 cubic feet of soil per man and his site selection should consider labor limitations. The frequency of artifacts, burials, and other features may limit the amount of excavation accomplished in a day. The beginning student cannot fail to do better work if he realizes that the chief aim of all his excavations is the preservation of remains which will be put in some permanent depository. Artifacts, and sites as a whole, are clues to human action, and the archeologist is faced with the task of extracting as much as possible in the way of a reconstruction of the past. Likewise, an amateur must prepare himself as completely as possible to take advantage of everything a site has to offer.

The failure to observe some significant fact may be condoned as human fallibility, but to fail to observe several important facts as they are presented to the eye by spade or trowel is inexcusable. No matter how accurate and precise your methods may be —you must know how and what to observe, and continually improve your techniques of observation. In time, a trained excavator develops a "touch" or "feel" which serves him so well that the slightest contact with an object is sufficient for him to release pressure and avoid breaking the artifact. An experienced amateur can tell from contact whether he has struck bone, flint, pottery or stone.

The selection of a site will depend in some measure upon which of these three general reasons is the main objective of the archeologist.

D. Methods of Excavation

The method of actually digging units also varies according to the character and contents of a site. Here again a number of standard systems are in use.

At times a unit or a series of units are dug entirely in a horizontal direction from one side to the other—a single vertical face from the surface to the site bottom is maintained at all times. When optional, this method has little to recommend it unless it is necessary to observe and record, or to photograph the exact stratigraphic position of all artifacts. This is almost never necessary. There is present a danger of material falling out unseen—if it does, its location is lost forever. This method precludes the use of any implement but a trowel in a soft deposit.

The vertical face method is the best way of excavating hard deposit which requires the use of a pick. It is rarely necessary to work the entire depth of a unit in this manner, however.

Level-stripping is a widely used variation of this method. It consists of excavating in a staggered series of vertical faces from six inches to a foot or more at a time at successive depths. In a cross section it looks like a set of steps. The result is that the levels are excavated as separate distinct units by the workers assigned to them rather than coordinate squares. This method is an advantage only when it can be carried out over a large area. This must be known in advance, hence it is restricted to non-exploratory excavations either in trenches or open sections. The chief advantage of level-stripping is to make it easier to observe the stratification and the segregation of material from the various strata. Each vertical face usually extends the depth of a single stratum of a site. Generally, the exclusive use of small excavating implements is necessary.

The unit-level method is the most common method of excavating sites showing little stratigraphic variation. The technique is to dig each section defined by the lines of the grid system vertically as a separate unit, each being completed by the excavator before another one is started. This is done in separate levels usually six to twelve inches deep with one level being completed before beginning the next. This method makes available to exploratory excavation some of the advantages of level stripping. It is impossible to lose the approximate vertical location of any artifact and stratification is easily noted. Unlike any other system it is generally done with a shovel. Two or more adjacent units can be excavated in this manner. Deposits from each unit level may be screened to recover artifacts that may be overlooked. No system should be rigidly enforced but all must be adaptable to any condition which may be encountered. This is according to the judgment of the individual. It may also be advisable to combine two or more of these methods or even devise new ones.

A careful statement on excavating methods used should be set forth in your notes so that future workers will know how the artifacts were recovered. It is always advisable to complete the excavation of any individual unit that has been started. By not doing so you will not only ruin your site, but have incomplete records to show for it, and a lot of time and man hours wasted. Cases have been known where individuals and small groups have started excavations on their sites and have quit to complete them at some future time that never materialized. Please bear in mind at all times that such projects are "big projects" and cannot be done without sufficient help. The size of your crew could be limited to less than a dozen on the average—this depending on your site or area to be excavated. Depending on the weather and your time limit, it should be possible to excavate an entire site or the greater part of it.

E. Excavating A Standard Unit

The average excavating unit will be five feet square and its limits will be defined except where special considerations necessitate modification or exception by the intersecting lines of the coordinate system. These are represented by stakes, each bearing a tag giving the coordinate location and marking the corners of the unit. Before beginning the excavation of a unit it will be necessary to decide where the dirt will be thrown. You must be careful not to pile it on the surface of any unit that will be excavated or where it will be difficult to replace at the end of your dig. The depth of any unit can usually be determined in advance from its position on the site and by the indications from nearby excavations. A site is usually excavated under the agreement that it will be left undamaged, or as it was found originally. This means that when the dig is completed, all excavated earth must be replaced and the surface left level and smooth. A little foresight in the distribution of backdirt may save a lot of trouble in backfilling. In exploratory excavation, the excavated earth is piled as compactly as possible on the surface of one side of the unit. To insure sufficient dirt to fill all excavations, the area in which backdirt is to be thrown should be completely cleared of all vegetation, otherwise it may settle among the plants and grass, making it difficult to remove. Large dirt piles should be avoided as they are difficult to handle, making it necessary to move the dirt a considerable distance when it is replaced. Unless a stratigraphic profile is to be preserved it may be permissible to throw the earth from one unit to another which has been completely excavated. The main point is to keep some pattern of backfilling in mind at all times during your excavation so your pits or trenches can be refilled with loose earth as near at hand as possible. The dirt should also be sufficiently packed so it will not settle too much after a heavy rain. When a hole is being filled it should be tramped on occasionally and packed filmly with the shovel. It may take several or more hours to fill a hole of a five by five unit which has been dug to a depth of five feet. There is a saying that "handfilling is good for the soul."

You must also remember that the stakes marking the corners of the excavated units must be used in recording the location of all materials recovered. Stake locations must be carefully preserved. Regardless of your methods—leave them standing on top of substantial columns of earth which are not excavated until your stakes have no possible further utility. Columns which obstruct the excavation of a burial must be immediately removed and noted on your map and in your notes. Where burials occur in concentrated areas the discovery of a skeleton will generally be the signal for expanded excavation in the immediate area. A burial almost never lies wholly within a single excavated unit and its discovery necessitates the digging of one or more adjacent units. When time is limited it may be advisable to excavate only that part of the unit in which the burial lies. When an excavation is being conducted in the vicinity of a burial, a screen or box can be placed over the exposed part, or it can be covered with earth and its location marked to prevent damage.

The uppermost stratum of six inches or so of an excavation unit may consist of topsoil which is often sterile or lacking material of any kind. Where the topsoil is absent, the uppermost few inches often contain the root systems of a vegetation cover which may also be sterile. The presence or absence of topsoil can be determined by test excavations. This surface level can be dug with a shovel and thrown aside without examination if the site yields no surface material of any kind. The presence of surface material usually indicates that the topsoil has been cultivated or disturbed in some way. Should this be the case, examine all deposit within the unit from the surface down. After you have removed the sterile soil from the top of your unit, the actual business of excavation begins. If the work is being done with a shovel, work first along the base of one wall and systematically across the base of the opposite side. The entire floor of the unit is turned over to a depth equivalent to the length of the shovel blade, which is usually from six to twelve inches. As each shovelful of dirt is dug, it is spread as thinly as possible over a clean section of the floor of the unit with the edge of the shovel and carefully examined. If an artifact is revealed, its location should be recorded on the necessary form, and a note made of it in your notebook before work is resumed. After examining the earth for more objects it can be scraped aside into a pile out of the way. The course of your excavation is simplified considerably if this loose dirt is thrown out of the unit and onto the backdirt pile at frequent intervals rather than allowing it to accumulate in the bottom of the pit. As each unit level is completed the floor of the pit should be scraped clean and carefully inspected. All artifacts recovered in each unit should be placed in a small paper bag and noted as to level. As the unit becomes deeper, the two (or four) walls should be watched for evidences of pits or stratigraphic layers. Whenever possible, units are always excavated down to the base of the site, or in other words, to subsoil. Subsoil is always sterile unless it was disturbed by the original inhabitants of the site. Perhaps at the time of the site's earliest occupation there may have been no accumulation of site deposit and the earliest burials may often be found interred in the subsoil. It is a good idea then to excavate a foot or two of subsoil below the site bottom in the same way and manner in which the midden deposit itself was excavated. Always be certain that the excavation of a unit has gone far enough into sterile subsoil so that there is no possibility of missing any burials or artifacts. Cases have been known where amateurs thought they had cleared out a site only to have others come in and find a more interesting culture than the one that was excavated.

Experience and failures can always determine what to look for in your excavations.

The method of using the shovel is to place the point on the earth and drive it downward almost vertically as far as possible by pressure of the foot against the back of the blade. In doing so, if the blade makes contact with any object, the shovel should be withdrawn immediately and the object investigated with a trowel. If any material worth recovering is revealed, all general excavation ceases until it has been exposed, recorded and removed. Excavation techniques employed in recovering burials, etc., will be discussed later.

Many other circumstances may make the use of the shovel inadvisable, especially where numerous or small artifacts and fragile materials are present. Where these are known to be present, the excavation is normally conducted with a trowel. The best system to use here is to work against a vertical or slanted face of fairly restricted depth, usually not over a foot, slicing off and examining small amounts of earth at a time with the edge of a trowel. Digging vertically by prying with the point or scraping with the edge of the trowel is poor technique and may result in damaging the materials recovered. The trowel and the shovel are the only two implements used in the general excavation of midden deposit and the remaining tools mentioned previously are restricted to the specific work of recovering materials. Picks have no place in the excavation of a soft deposit.

During an excavation it must be remembered that a site is in a larger sense itself an artifact, resulting from human activity. Digging destroys this artifact and it is necessary that the archeologist record by means of notes as complete a description as possible of the site as it is being dug, keeping in mind the fact that his observations will be the only source available to reconstruct the former occupation of the site once excavation has been completed. The object of note taking is to form a running commentary on what is done, and how it was done, not merely what is found. The notes should be a record of technique as well as of results, so that future work may be guided by the achievements or errors of a particular dig. Notes should be kept in a bound notebook to prevent the loss of loose pages. The type of notebook used by surveyors in which one side of each page is cross sectioned is extremely useful. It provides an immediate scale which can be used for drawing artifacts in proper proportion or for mapping. A soft dark pencil of at least No. 2 hardness is convenient for writing as it is easily read and more permanent. Attention should be paid to legibility, particularly of numbers, and no esoteric symbols should be used. Your notes should be kept in such a condition that they could be understood by anyone else referring to them; they should be kept as clean as possible under the working conditions. Any necessary elaborations of data recorded briefly on the site card or map should be placed in the notes, not forgetting the location of the datum and an abstract of the plan of the grid layout.

While excavating, particular attention should be accorded depths, stratification, and concentrations. When the crew is ready to begin the actual excavation, the site designation, date, and excavation unit should always be stated. Presence and depth of sterile topsoil should be carefully noted at horizontal intervals frequent enough to demonstrate any variation. Depth of plowing or other surface disturbances such as house foundations, posts or pits, are of great consequence. The depth of unit levels should be entered and any changes noted. The condition of the midden soil should be given with reference to composition, contents, consistency, moisture content, and any disturbances by rodents. These factors should receive constant attention and any variations should be noted.

Stratification is of utmost importance. It may be visible in the walls of the excavation as a sharp change in color of the midden, by layers of different composition or contents, or by a change in consistency. Whatever its nature, an exact depth can usually be given at frequent intervals. If there is no stratification it should be stated. The tools used should also be mentioned and if one level is screened and others are troweled or spaded, a difference in the number of artifacts recovered may result and the several techniques must be taken into account.

One of the most important functions of the notebook is to keep a record of artifacts which are not included in the permanent collection from the site.

After the return from the field a permanent copy, preferably typewritten, should be made of the notes and filed where it can be made accessible to others. Problems may arise from studies made of the site or its contents and field notes are of great value to orient students going into a new area.

(To be continued.)

The Society for Pennsylvania Archaeology "Honor Roll"

As reported in a preceding issue, the Membership Committee has extended our drive for the next two-year period to reach a roster of 1,000 members. It was also reported that our membership was increased by 201 new members in a year's time—this with the help of our membership and repeated drives by the committee. Our thanks are extended to you who have helped and to those who have helped more than once. We would appreciate it very much if you will let us know whether your name has been omitted here. We are still receiving application blanks without names on the bottom—we must have this in order to give you the credit. Should you move in the meantime—please let the secretary-treasurer know your new address so you won't miss out on your next issue of our publication. We are now in the midst of the "renewal period," have you received your 1955 membership card and your "Membership Certificate?" The size of our Membership Certificate is 7x9″ and suitable for framing. It is something that you will be proud to frame and display.

(* indicates more than one member.)

Mr. Emil A. Alam, Aliquippa, Pa.
**Mr. Edward M. Barton, Fleming, Pa.
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Society Notes and News

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Vincent R. Mrozoski, Secy.-Treas.
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It is advisable to order as soon as possible since some of our issues will soon be sold out and cannot be replaced.

ANNUAL MEETING OF THE SOCIETY

The Annual Meeting of the Society for Pennsylvania Archaeology was held at 1:00 P.M., Saturday, May 29th, 1954, at the Mineral Science Auditorium, State College, Pa., with the Pennsylvania State University being our host. President T. H. Daugherty welcomed the membership present and called for a vote of thanks to our host for the use of the new auditorium and to Dr. Frederick R. Matson who arranged the program and the dinner reservations. Following the reading of the minutes of our Fall Meeting which was held jointly with the Allegheny Chapter No. 1, in Pittsburgh, Pa., our president called for old business. The subject of Mrs. H. H. Gilkyson's handbook on various types of artifacts was brought up and our president stated that he would check with Mr. Alton Long on the matter to see what was done about it. Mr. John Witthoft reported on the "microfilming" of our bulletin and stated that he was practically finished with the process and that the cost of having it done would be in the neighborhood of $20.00. Once finished the film will be given to the secretary-treasurer who in turn can have copies made for those desiring them. Director Charles L. Lucy reported on getting our back-issues delivered and he was commended on doing such a thorough job of it. Since Editor Dr. Vernon Leslie was unable to attend, his Editorial Report was read by Mr. V. R. Mrozoski. Dr. J. Alden Mason then spoke of the fine work our editor has been doing and stated that the Society is greatly indebted to him for one of the finest publications of its kind in the country and then made the motion that he continue as our editor, which was immediately seconded by Mr. Don W. Dragoo and approved by the membership present. The following Treasurer's report was then given to the secretary-treasurer:

TREASURER'S REPORT

Submitted at the Annual Meeting of the Society for Pennsylvania Archaeology, State College, Penna., Saturday, May 29th, 1954. This report includes all transactions from December 5th, 1953, up to and including May 25th, 1954, corresponding with our Bank Balance.

CREDITS:

Bal. Dec. 5th, 1953 . .	$1366.25	
Dues Received	724.06	
Dividend on Stock, No. 21	2.40	
Refund, Hall's Motor overcharge	1.93	
Sale of Publications . .	229.90	$2324.54

DEBITS:

Printing costs, *BULLETIN*, Motor Service	$ 811.47	
Postage and Postals . .	69.00	
Refund, to agency in sending wrong renewal	3.75	
Photostats of State Libraries for drive . . .	5.35	
Membership to E.S.A.F.	25.00	
File card purchase in color	2.02	$ 916.59
Operating Balance		$1407.95

Debits standing against the Society: NONE.

I hereby certify that this is a true statement of activity concerning the funds of the Society for Pennsylvania Archaeology for the period from: December 5th, 1953, to May 25th, 1954, inclusive.

Checked and Approved by:
AUDITORS:
John A. Leppla Chairman
James L. Swauger
Signed:
V. R. Mrozoski
Secretary-Treasurer

The following committee reports were given:

Membership

Chairman Mrozoski reported an increase of 201 new members since our last Annual Meeting that was held in Philadelphia, Pa., last May 2nd, 1953, and gave credit for this to our own membership and to the repeated drives of the committee. He also stated that a Mr. A. E. Feige of New Jersey and Mr. Gordon K. Wright of New York were also of great help in our drive for new members. The following membership report was submitted:

Active	365
Act. Husb./Wife	15
Sustaining	35
Associate	43
Institutional	79
Life	17
Total	554

Society Projects

Chairman Witthoft reported that he had little to say concerning this committee other than nothing was being done in the Upper Delaware[1] and Shenango regions. That these are poorly known areas archeologically and that the situation is critical. We must get a lot of information in a hurry before these areas are flooded and destroyed. It is hoped that local students and amateurs will undertake this area as a project to gather as much information as possible in the little time left. There are also no Federal Funds or State assistance available. It was suggested that our organization get together with the Delaware Society to see what could be done here archeologically.

Society History

Little was also done here and President Daugherty reported that Chairman Leslie is kept busy as Editor of our bulletin, being unable to attend to make his report because of the serious illness of a relative. It is the aim of this committee to collect the history of our organization, which will require plenty of research and work. Dr. Daugherty also surprised us by stating that our publication will be 25 years old in 1955 and that Dr. Leslie hopes to prepare a "Silver Jubilee" issue for this occasion. This was met with instant approval of the membership.

Meetings

Chairman Miller stated that our Society had two meetings last year and had hoped to have two this year. The subject of meeting elsewhere besides Philadelphia, Pittsburgh and State College was brought up and Mr. Miller stated that Dr. Mary Butler suggested a joint meeting with the Delaware Society in Wilmington some time in the future. Dr. Mason said that this organization was small, but lively and we could consider such a plan. Other worthwhile suggestions to consider were a joint meeting with the New Jersey and New York organizations. Chairman Miller then suggested a joint meeting with the Eastern States Archeological Federation which will be holding their meeting in Pittsburgh on October 29 and 30, a Friday and Saturday. Vice President Swauger stated that the E.S.A.F. already set the dates of their meeting and perhaps we couldn't hold it with them. Dr. William J. Mayer-Oakes suggested that it would be wise to investigate this matter to see if we can hold a joint meeting since theirs was already scheduled. Chairman Miller will investigate as suggested.

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[1] In this connection the editor is constrained to call attention to the fact that his own research has been carried on in precisely this area for over twenty years and that part of it has been reported in previous issues of the Archaeologist. While it is not accurate to say that "nothing" is being done along the upper Delaware in view of constant and continuing field work plus the careful cataloguing and preservation of several hundred specimens recovered each year by the editor, Mr. Witthoft is in order with his statement that the situation is critical. Even though my efforts are conducted on no small scale, it would be out of the question for me to cope with the crisis presented by the threatened flooding of much of the valley by the construction of dams. This matter most certainly requires the attention of the Society..V. L.

Constitution & *By-Laws*

Dr. J. Alden Mason reported that he had a very active committee and was able to present a new "streamlined" Constitution which he read. Copies of this will be mailed our membership at a future date. Should there be no objections, it will be accepted by our Society. The subject of changing the name of our organization from Archaeology to Archeology was brought up and a lively discussion was held. One member stated that it was the study of the ancient cultures and that there would be the added expenses in having it changed with the State and the printers. The change was opposed by the majority of the members present.

Our Publicity Committee is inactive and it was suggested that more members be added here.

Under new business the Society accepted a new chapter into its folds—the Beaver Valley Chapter of New Wilmington. The move to accept this new group was made by Mr. P. Schuler Miller and seconded by Mr. Don W. Dragoo. It must be stated here that similar interest is growing in other parts of our state, especially in the central and eastern parts.

A letter was read concerning a buyer for our shares of stock and it was moved and seconded that we hold on to them.

Mr. William C. Reeves, treasurer of the Allegheny Chapter No. 1 of Pittsburgh, reported on the activities of the group and stated that the Section of Man of the Carnegie Museum is giving the members a course and a series of lectures on Archeological Field Methods which is being well attended. He also reported a membership of 151 with 17 new members within the past few weeks.

Dr. J. Alden Mason proposed that Miss Frances Dorrance be made our first Honorary Member, telling us of her activities in the early days of our organization and of the work that was done to get our group started. Other members of Miss Dorrance's acquaintance spoke highly of her and confirmed other reports of the good she had done for our organization. A motion was made by Mr. John Witthoft that we accept Miss Dorrance into this new membership which was seconded by Director Charles L. Lucy and approved by the membership. The secretary-treasurer was instructed to notify Miss Dorrance that she was accepted as our first Honorary Member.

We also learned with regret of the death of Dr. T. B. Stewart, formerly of Lock Haven, and later residing at Bethlehem Pike, Ambler, Pa., who died February 4, 1954, and of the death of Miss Mary H. Linn of Bellefonte, Pa., who died on March 20, 1954. Miss Linn had been a member of our organization since June 24, 1930.

It was also motioned by Dr. Mason and seconded by Dr. Mayer-Oakes that we renew our membership into the Pennsylvania Federation of Historical Societies for this year. Dr. Mason stated that we were a member for a long time and that every Society such as ours should belong. This was approved by all present.

The "Pin" idea was again brought up by Mr. Mrozoski who showed us a sample of the "keystone with arrowhead" that was suggested by Dr. Leslie and shown at our Philadelphia meeting. It was stated that the die for this clasp or lapel pin would cost around $20.00 and that Dr. Leslie would again look into the matter of the price per pin. Mr. Mrozoski stated that he would also investigate the matter of cost. It was then suggested that this be done and brought up again at a future meeting.

The following officers and Directors were elected into office:

President . . . . P. Schuyler Miller
First Vice President . . . . . Dr. Mary Butler
Second Vice President . . James L. Swauger
Secretary-Treasurer . . Vincent R. Mrozoski
Directors: Miss Frances Dorrance
Dr. T. H. Daugherty

Dr. T. H. Daugherty replaces Miss Katherine W. Bennett whose term expired.

Mr. P. Schuyler Miller thanked the membership for electing him to the Presidency of the Society and since there was no other business, the meeting adjourned upon motion of James L. Swauger, seconded by Don W. Dragoo, with the following program carried out, illustrated with slides:

Dr. William J. Mayer-Oakes, "1953 Carnegie Museum Excavations."

Mr. Don W. Dragoo, "Early Burial Complexes of the Ohio Valley."

Mr. John Witthoft, "Susquehannock Prehistory As Traced by Pottery."

Dr. Frederick R. Matson, "Collecting Charcoal for Radiocarbon Dating."

At 6:30 P.M. a dinner was held at the Allencrest Tea Room, with an interesting talk later by Mr. Charles F. Wray of the Lewis Henry Morgan Chapter, N.Y.S. A.A., his topic, "Seneca History and Archeology." Mr. Wray's talk was illustrated with beautiful colored slides.

APPLICATION FOR MEMBERSHIP

Date .... 19 . .

To the Society for Pennsylvania Archaeology:

I hereby request that the Board of Directors of the Society for Pennsylvania Archaeology elect me to Active (Associate, Sustaining, Life) membership in the Society. In order to expedite the transaction, I herewith send the desired fee $ ....

(Signed) ....

Name (Please Print) ....

Address ....

....

The archaeological quarterly magazine is sent free to all members.

Classes of membership

Associate (under 18 years of age)	$ 1.00
Active	3.00
Active (husband and wife)	4.00
Sustaining	5.00
Institutional	3.00
Life	50.00

All checks or drafts for membership fees or dues should be made payable to the Society for Pennsylvania Archaeology. Mail application and remittance to Mr. Vincent R. Mrozoski, 407 Phillips Street, Aliquippa, Pa.